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ABSTRACT

THE CATALYST FOR THIS STUDY WAS THE IMMINENT EXPANSION OF TWO MAJOR ACADEMIC CENTERS, THE COLLEGE OF EDUCATION AND THE DEPARTMENT OF BEHAVIORAL SCIENCES. ITS PRIMARY PURPOSE WAS ESTABLISHED AS THE SITE PLANNING AND DEVELOPMENT PHASING OF THESE PROGRAMMED FACILITIES. ALSO THE DESIGNATED SITE WAS TO OBTAIN EFFICIENT AND HARMONIOUS LONG-TERM UTILIZATION WITH THE ADDED CONSIDERATIONS OF VEHICULAR AND PEDESTRIAN ACCESS, OFF-STREET PARKING, AND SERVICE AND EMERGENCY VEHICULAR ACCESS. A SERIES OF ALTERNATIVE BUILDING CONCEPTS EXPLORE THE BASIC POTENTIALS OF THE SITE. (IC)

ALTERNATE DEVELOPMENT CONCEPTS

FOR THE

SOUTHWEST QUADRANT

OF

THE UNIVERSITY OF OREGON

Prepared for the
Oregon State Board of Higher Education

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November, 1968

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FOREWORD

All campuses of higher education are in transition. This dynamic and volital activity is not limited only to the penetration of the academic unknown or the restructuring of the social system, but also is extending to the physical and space framework in which the University operates. The concept of a university being composed of the three elements of people, ideas, and place, and in that order has tended to depreciate the status of the place and consider it only as a space to be occupied. Yet there is mounting evidence that the environment of learning may contribute as much to its accomplishment as the talent of the individual and our exploration into this realm is just beginning. This study is devoted to the premise that the creation of a satisfactory or successful academic environment is dependent upon the utilization of all those capabilities of the environmental planner to create a campus with an orderly and understandable functional organization, a logical and efficient structural framework and a meaningful and stimulating environment.

Scope of Study

The catalyst for the study has been the imminent expansion of two major academic centers; the College of Education and the Department of Behavioral Sciences. These activities have been programmed to expand in two phases; the first containing approximately 187,000 square feet, and the second, approximately 253,000 additional square feet. The primary charge of the study was established as the site planning and development phasing of these programmed facilities on the designated site to obtain efficient and harmonious long-term utilization with the added considerations of vehicular and pedestrian access, off-street parking, and service and emergency vehicular access.

In addition to this, however, the study program provided for the preparation and analysis of a series of alternative building concepts for the future development of the designated site. This study emphasis would explore the basic potentialities of the site and the alternative building configurations which it could accommodate in light of the specific demands which may be put upon it, not only by the programmed functions, but by the expansion of those existing on the site. The program prepared by the Office of Planning and Institutional Research called for the exploration of the full potential of the Southwest Quadrant of the campus in order to determine its total building capacity with varying levels of building density and considering alternative site planning and development phasing strategies. (See Appendix 1).

The charge of the study program led to a set of planning implications that required consideration throughout the course of the study. These included the following:

1. The re-evaluation of the present policy of considering campus development patterns:

   In the immediate past there has been the consideration of programmed development on an individual unit by unit basis. This has generally been required

because of the independent funding and construction phasing of each project which has required it to be considered, regardless of size, location, or long-range implications, separately from any other project. Because of the potential for inter-relating common programmed needs and to establish for a major building complex, common and continuous development criteria, this study has taken the opportunity to bridge the gap between independent programs and attempt to relate them to a broader concept of university development. This study also attempts to illustrate alternative physical frameworks which are available and might be applicable to the development of a university campus, and to evaluate them in respect to this particular program.

2. The re-evaluation of present campus development space patterns, building density standards, and land coverage:

   This site in the main university area stands alone as the single remaining area available for immediate large-scale development. In addition, its relationship to other adjacent areas which might be suitable for future development, implies that a pattern and a set of design criteria established for this site could well extend into other areas for the major building program of the next decade. This study has attempted to utilize contemporary design and construction technique influences to achieve new directions for establishing standards for building location, building density, and land coverage. In addition, it is apparent that at some future date, the land available to support this university may be limited. This study attempts to indicate those potential directions which future university planning and development might take to offset the diminishing land resources which might be available and to make the most efficient utilization of limited construction funds.

LUTES AND AMUNDSON, A.I.A.

John M Amundson

JOHN M. AMUNDSON, A.I.A.

November, 1968

GENERAL OBSERVATIONS

The Site

The site established for the study is bounded on the East by the Pioneer Cemetery and Music Building, on the South by Eighteenth Avenue, on the West by Alder St., and on the North by the Library and existing Education Building. There is a difference in grade of approximately 35 feet sloping up from Alder Street to the cemetery boundary. This grade is relatively uniform in the North-South direction.

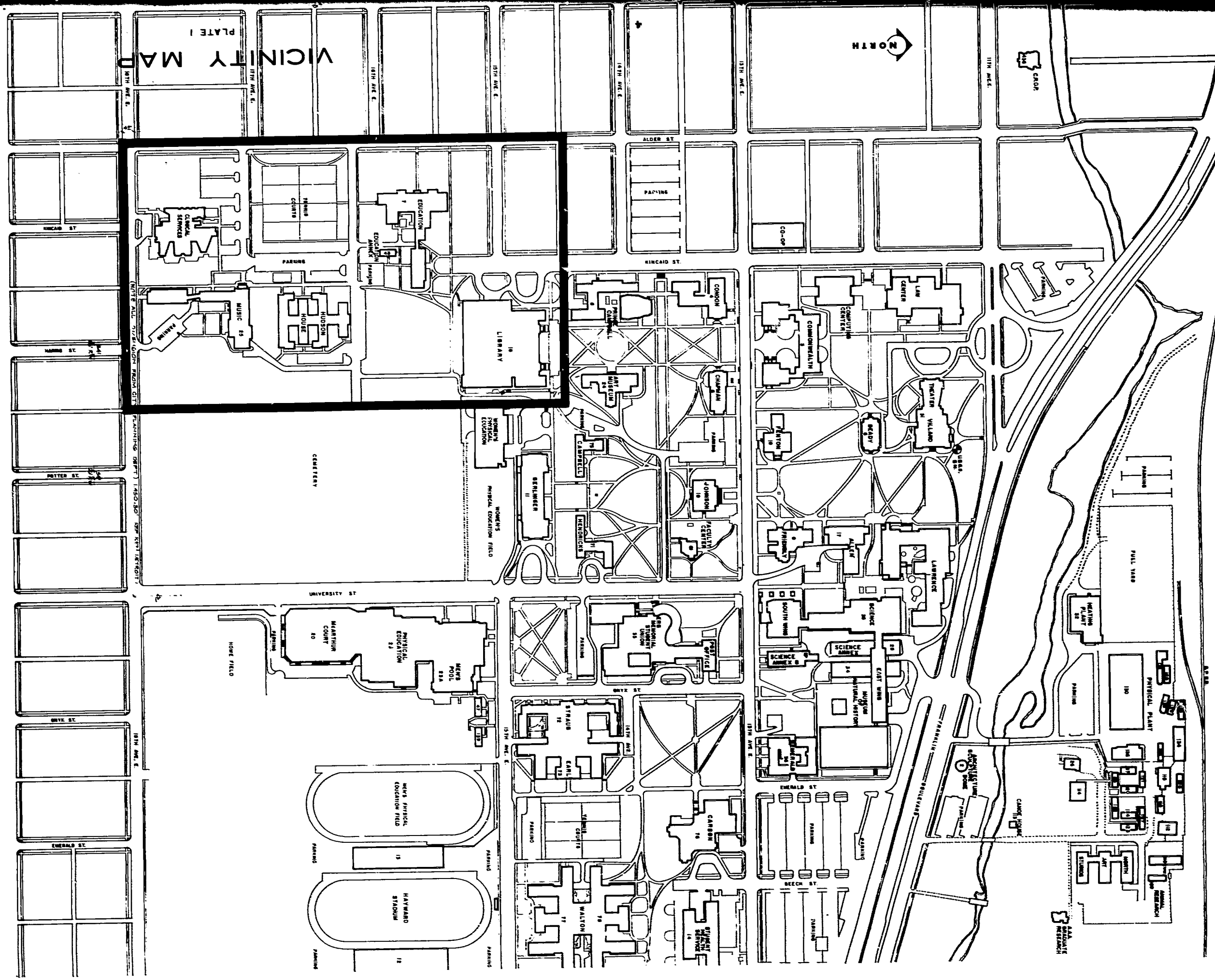
The site contains the Vets Dorm Building now being utilized for general office space; tennis courts, and a former high school building used by the College of Education. A Clinical Services Facility is presently under construction West of the Music Building. The area West of Alder Street and South of Eighteenth Ave. is single and multi-family residential.

The development of the site with regards to major pedestrian circulation assumes that the Pioneer Cemetery may at some future time be available to the University and that the projection of the Kincaid Street axis presents a major access route.

No detailed soil investigations have been made for this study, however, based upon past and current construction on the site, rock is evident within ten feet of the surface over most of the site. Consideration of this has been made in each study alternative.

VICINITY MAP

PLATE I



The Program

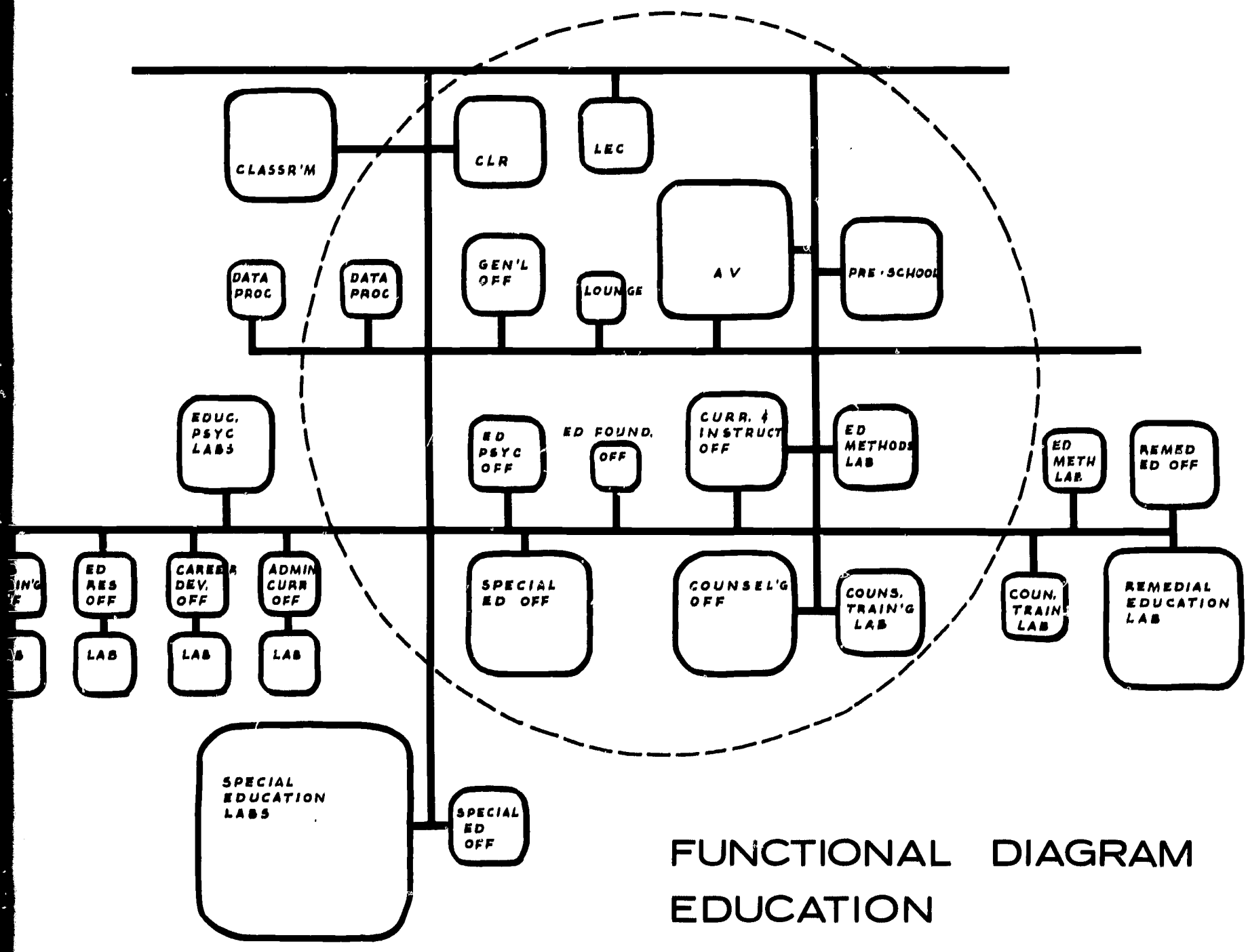
A design program outlining the functional requirements for the Department of Behavioral Science and the College of Education along with their projected net assignable areas and gross building areas as prepared by the Department of Institutional Planning has been used as a basis for this study. The functional diagrams showing the relationship of departmental organization are shown on Plates II and III. The basic net floor area requirements included in this study are shown in Appendix 2. The assignment of spaces is tentative and serves only to enable the development of alternatives. Each scheme can be adapted to the desired program.

Each alternative retains the iden.ity of the College of Education and Department of Behavioral Science.

In addition to fulfilling these basic program requirements, this study has been extended to establish for each alternative the ultimate density which could be accommodated. A summary of the projected areas for each alternative are included in Table 1.

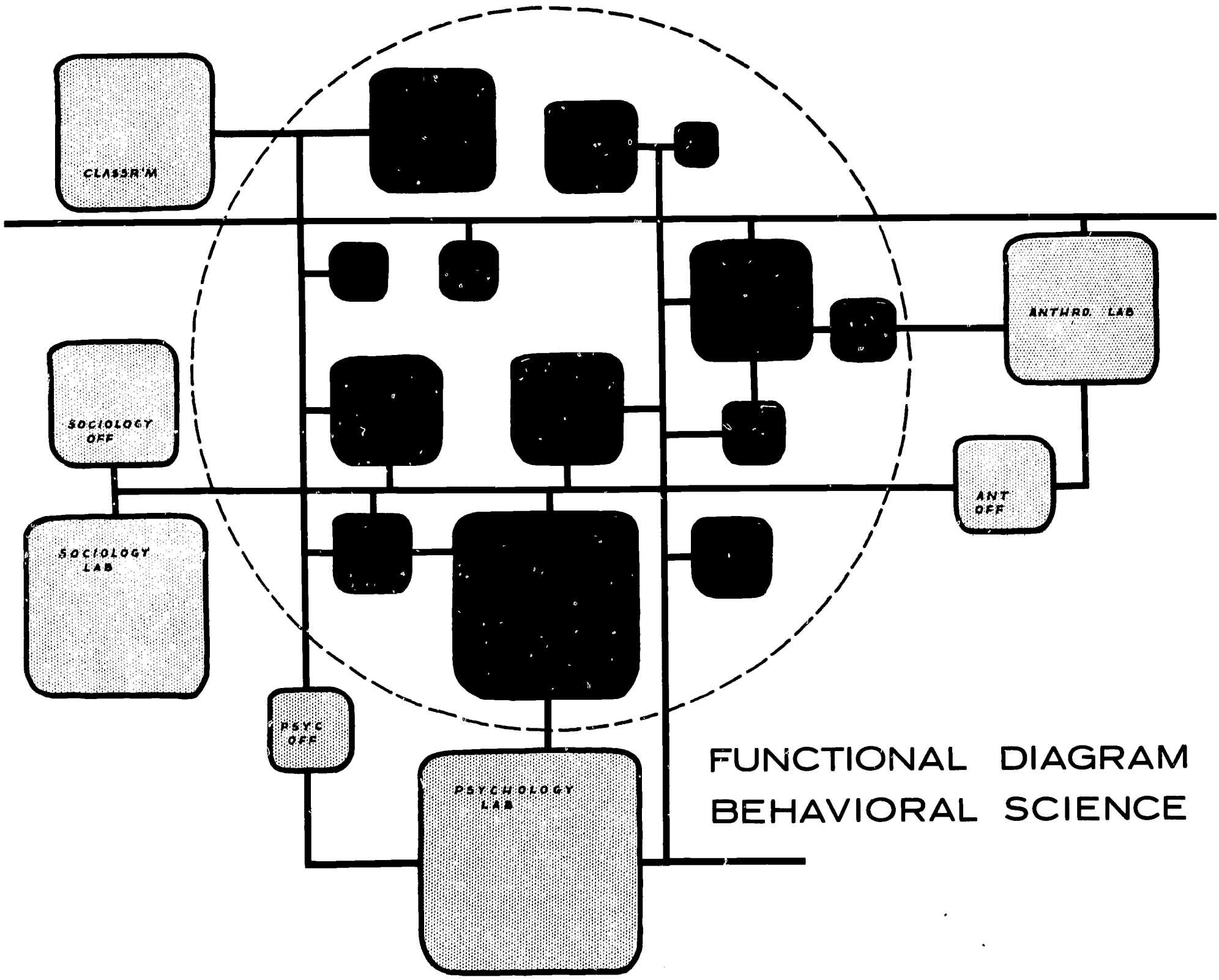
Existing and Projected Facilities

The consideration of facilities now existing on the site or anticipated additions thereto has been made throughout the study. This is limited, however, to their effect on the development of the program facilities as they might effect vehicular and pedestrian access and egress; off-street parking; service and emergency vehicular access; and volumetric and building density impact.



FUNCTIONAL DIAGRAM
EDUCATION

PLATE II



FUNCTIONAL DIAGRAM
BEHAVIORAL SCIENCE

PLATE III

A six-story addition to the School of Music has been projected East of the existing buildings and enclosing an interior courtyard. This location affects the development alternatives only to the extent of determining the location of vehicular access to the Education and Behavioral Science complex. Consideration should be given to the eventual removal of those portions of the Music School complex which are obsolete and to incorporate them with the projected addition into the continuation of the Education and Behavioral Science complex.

The Clinical Services Building now under construction is located to the South along 18th Avenue. It is anticipated that additions to this facility in addition to the vertical expansion of the existing building, would be located at the corner of 18th and Alder. Parking for up to 200 cars could be provided under this structure. It is recommended that the addition at the intersection of 18th and Alder Streets should be of low profile due to its proximity to the street and relationship to surrounding residential development.

No major additions except of a limited nature are anticipated to the Library in the near future. It is anticipated, however, that as the University population expands, a major expansion of this facility would be necessary to serve the growing enrollment. The area South of the existing Library has been reserved for future expansion. This study presents the addition if contained within the present site, to be a major multi-story element. The extension of the Library either East into the cemetery area or West toward Alder Street would permit a less massive volumetric form for this facility.

Parking

The original building program proposed the provision of 500 parking spaces on this site in addition to the academic buildings. This was subsequently modified to request the provision of as many spaces as possible within the context of the scheme with the assumption that a proposed parking structure at 14th Avenue between Kincaid and Alder Streets would be developed in the future. Thus, each of the schemes attempts to provide only as many parking spaces as can be logically constructed as a part of the building program.

Construction Phasing

The construction phasing for both the School of Education and Behavioral Science facility is in two increments. The anticipated gross area for the first phase for the College of Education is 83,250 square feet and for the second phase 84,400 square feet. The anticipated gross floor area for the Behavioral Science Building is 104,000 square feet for the first phase and 168,900 square feet for the second phase. This results in a first phase construction program of 187,250 square feet and an anticipated second phase of 253,300 square feet. In order to make the highest utilization of existing facilities for as long a period as possible, Phase 1 provides for the retention of all existing buildings on the site except the Vet's dormitory and the tennis court facilities.

The study attempts to indicate the maximum floor area which might be logically placed on the site. This has been indicated in three steps; Phase 1, the School of Education and Behavioral Science programmed first phase; Phase 2, the programmed expansion space for these facilities and; the ultimate area recommended to be placed on the site commensurate with the characteristics of the scheme.

Limits of Density

The ultimate development for each scheme is limited by the scale of the building complex as it is related to the surrounding campus facilities as well as to the adjacent residential areas. It has been attempted to place lower building elements along Alder Street with higher elements in locations along the East side of the site where terrain elevation differences could be capitalized. Building areas and densities for the three phases are tabulated in Table 1.

Projected Alternatives

Scheme 1 projects a group of individual buildings located on the site according to academic activities and having functions within the building located according to the density of use. Circulation on the site occurs in open space between the buildings. There is no inner connection of building elements except that which might be anticipated when two buildings are located in near proximity. This scheme reflects the current method of establishing building location and density on this and most other University campuses. Due to individual programming there is a lack of visual continuity between buildings.

Scheme 2 projects a group of interconnected building elements of similar size grouped according to major academic functions and interconnected by general office or classroom spaces. A strong organizational framework including structure, circulation, and utilities forms the basis for this scheme and little latitude for varying individual building size is available.

Scheme 3 projects a mixture of building size, height and location on a strong framework of horizontal and vertical circulation, modular structural framework and mechanical service systems. Departmental activities are consolidated to retain functional organization and departmental identity, however, flexibility between the areas is provided to allow change in long-range academic programs.

Scheme 4 projects a minimum number of structures with large areas of loft-type spaces with departmental activities interrelated within the buildings. Flexibility of space utilization can be accomplished by interconnecting circulation routes or building elements.

Scheme 5 is a synthesis of schemes two and three and establishes a series of regular building elements located on a strong organizational framework of circulation, continuous structural module and service systems. Departmental identity is retained by location of departmental activities in separate buildings with connecting links of interrelated activities such as classrooms and offices.

Conclusion

This study has explored various alternative building concepts for the future development and phasing for the construction of the College of Education and the Department of Behavioral Sciences in the Southwest Quadrant area of the University of Oregon. This report explores a range of alternative strategies which might be utilized for the development of this area rather than establishing a single design solution. These alternatives range from individual buildings such as Scheme 1, through interconnected building complexes with varying degrees of discipline, such as Schemes 2 and 3 to the loft-type

building where functions are internally intermixed. However, in the course of the study, it became clear that the ultimate solution did not lie in any single set of criteria, but rather on the careful selection of those most beneficial to the specific activities to be undertaken in each department. This has resulted in the development of a combined scheme which takes the best of each of the others and explores its ultimate application to the program requirements. This final scheme has not been projected into architectural design which would reflect the expansion of the program nor the detailed testing of its functional organization. It does, however, illustrate the utilization of beneficial aspects of the other schemes into a comprehensive development and phasing plan.

The summary of the building area provided by each scheme indicates that this final scheme is capable of providing an ultimate gross floor area of 728,000 square feet with a relative high efficiency of 63% and low ground coverage of 22%. The present gross academic area of the Campus is 1,800,000 square feet. The density capability of Scheme 5 would represent 40% of the existing academic area capacity.

AREA & DENSITY SUMMARY SHEET FOR ALTERNATIVE DEVELOPMENT CONCEPTS - SOUTHWEST QUADRANT, UNIVERSITY OF OREGON - TABLE 1

	PHASE 1			PHASE 2			PHASE 1 & 2			ULTIMATE			
	Assignable	Gross	Effic.	Assignable	Gross	Effic.	Assignable	Gross	Effic.	Assignable	Gross	Effic.	% Ground Cover
Scheme 1	112,000	187,000	60%	151,200	248,000	61%	263,200	435,000	61%	315,000	516,900	61%	29.5
Scheme 2	112,000	224,000	50%	151,200	240,000	63%	263,200	464,000	57%	303,000	521,950	58%	21
Scheme 3	112,000	193,000	58%	151,200	260,000	58%	263,200	453,000	58%	415,000	690,300	58%	19
Scheme 4	112,000	181,000	62%	151,200	256,000	59%	263,200	437,000	60%	423,000	750,000	60%	34
Scheme 5	112,000	200,000	56%	151,200	236,000	64%	263,200	436,000	60%	458,000	728,750	63%	22

Excluded From These Figures

Library- 270,000 s.f. gross (expansion to ultimate 500,000 s.f. not feasible on site)
Music- 64,800 s.f. gross
Clinical Services- 38,000 s.f. gross

Parking
All Schemes - 200 spaces under Clinical Services Addition-
Scheme 1- 51 cars
Schemes 2 & 4- 80 cars
Scheme 3- 160 cars
Scheme 5- 83 cars

TABLE 1

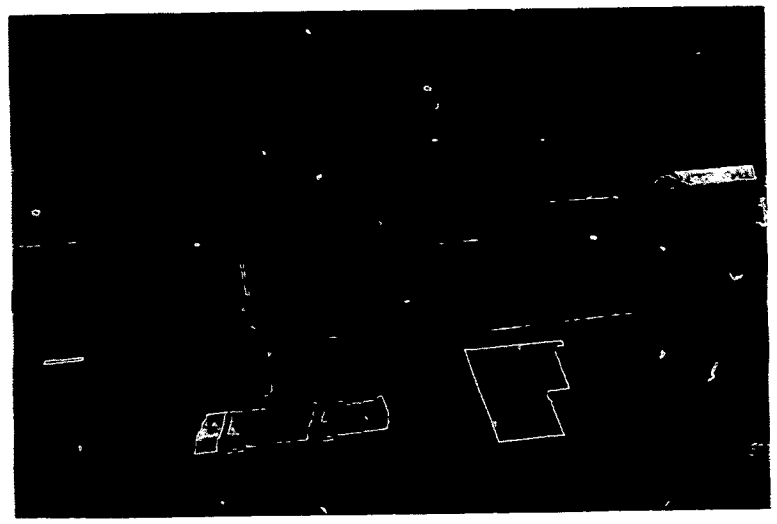
SCHEMES AND CRITERIA

The following portion of this report contains detailed verbal and graphic descriptions of each scheme. The following criteria are applied to each scheme and evaluated on the basis of advantages and disadvantages.

A. Phasing of programmed and ultimate space.
B. Circulation, pedestrian and vehicular
C. Flexibility within and between areas.
D. Open Space - See Table 1 for % of ground cover.
E. Mechanical implications.
F. Structural implications.

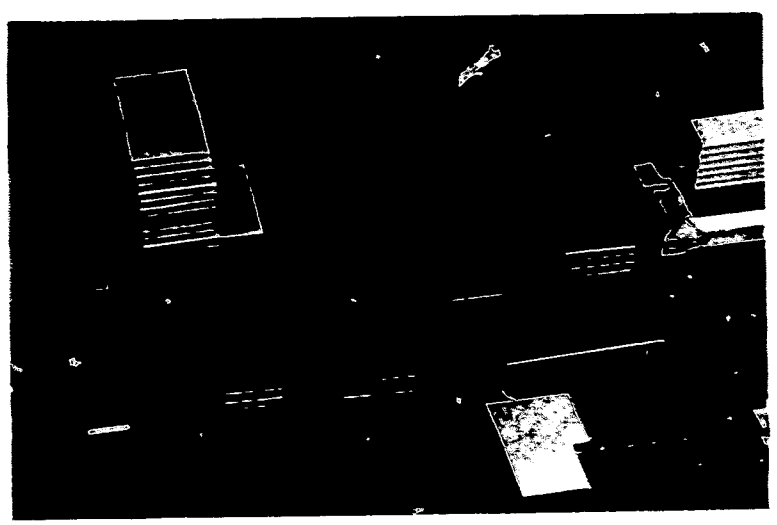
In the schematic diagrams that follow, classrooms (CR), offices (OFF), and laboratories (LAB) are noted as basic functions. It is noted that research and special purpose areas have been categorized with laboratories for the purpose of this study.

Circulation shown in the diagrams does not include that which is completely interior.



First Phase

Second Phase



Ultimate Phase

SCHEME 1

Description:

This scheme is representative of the current development concept of the Campus and consists of individual buildings grouped together to form the College of Education and the Department of Behavioral Sciences. Buildings within each group house the department functions such as laboratories with related offices, laboratories without related offices and general offices. Some buildings are interconnected by circulation links. Classroom buildings are located centrally to both groups and easily accessible to circulation from other areas of the University.

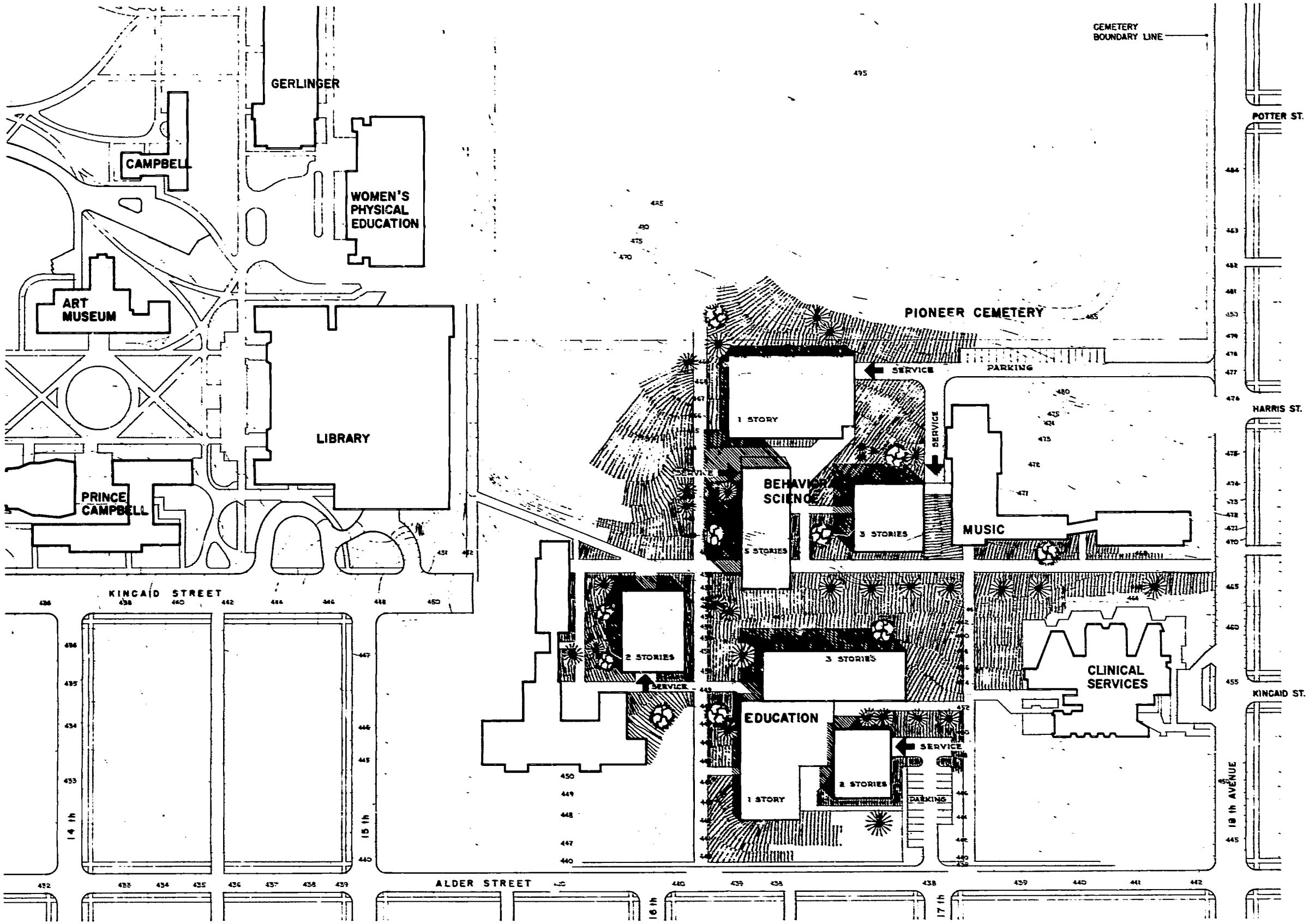
The buildings are separated by open spaces to permit adequate sunlight to penetrate the area. These areas serve as circulation routes between buildings.

Major pedestrian circulation is along an axis formed by an extension of the center line of Kincaid Street to 18th Avenue. A secondary axis extends from Alder Street East to a connection with a right of way at the cemetery. The individual buildings are entered at ground level from these two circulation routes. Circulation within the buildings may be perimeter or central but a part of the srructure.

Vehicular service is provided to each building in some cases paralleling the pedestrian route.

Public use facilities such as the Psychology Clinic and Preschool Demonstration Areas are located at ground levels within their respective schools and accessible from parking areas. Additional parking of 200 cars is provided under a future addition to the Clinical Services Building.

Incrementation is accomplished by adding separate buildings as well as extending vertically those previously constructed.



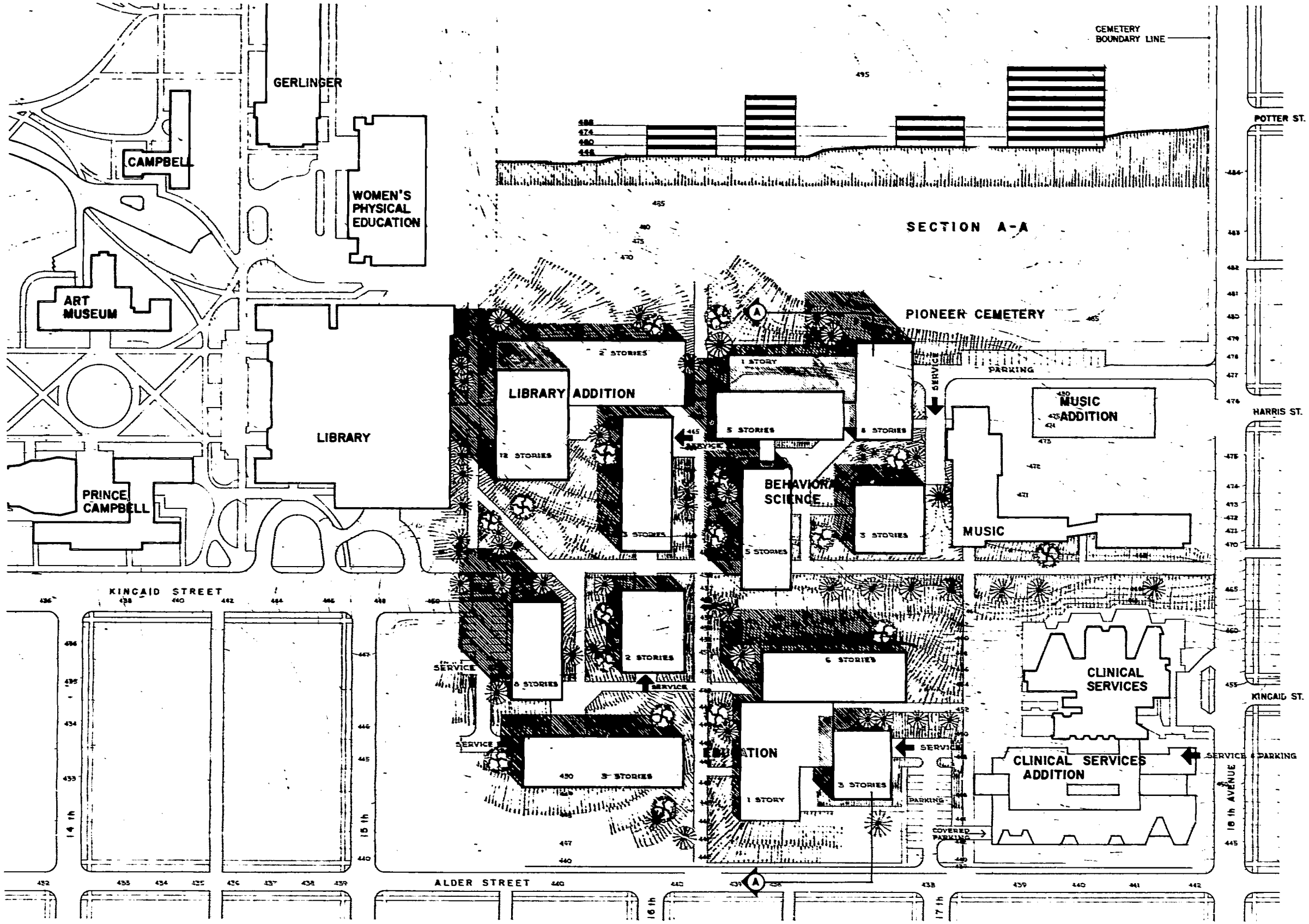
SCHEME 1

PHASE I
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

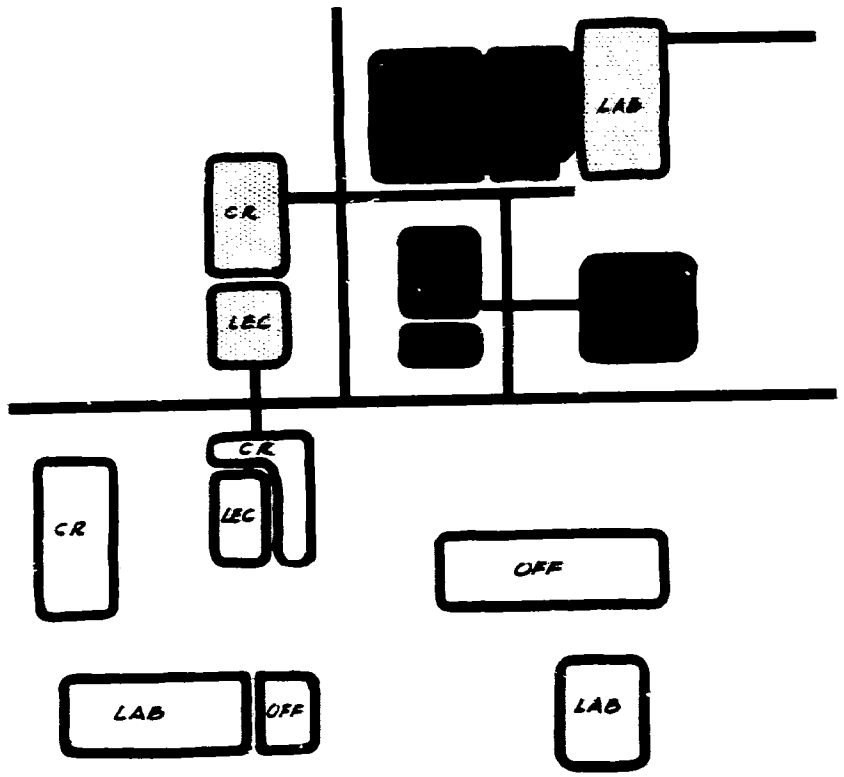
PLATE IV

0 100 200 300 FEET



SCHEME 1

ULTIMATE PHASE
S. W. QUADRANT UNIVERSITY OF OREGON



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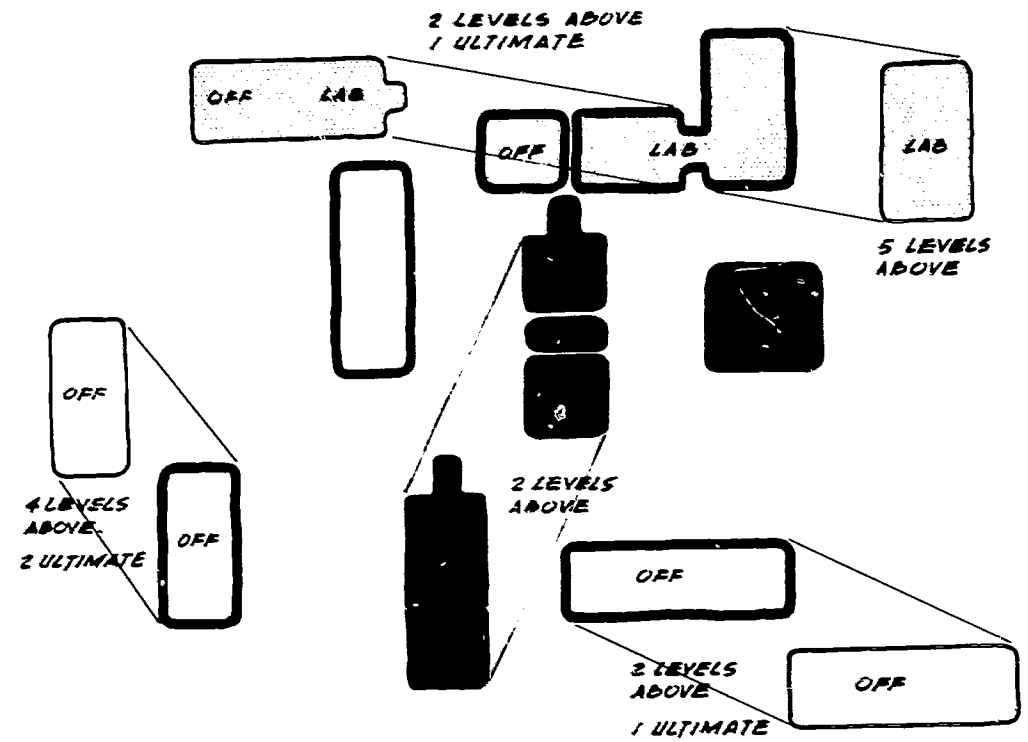

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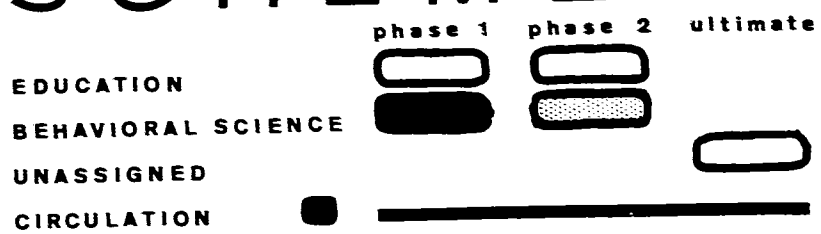
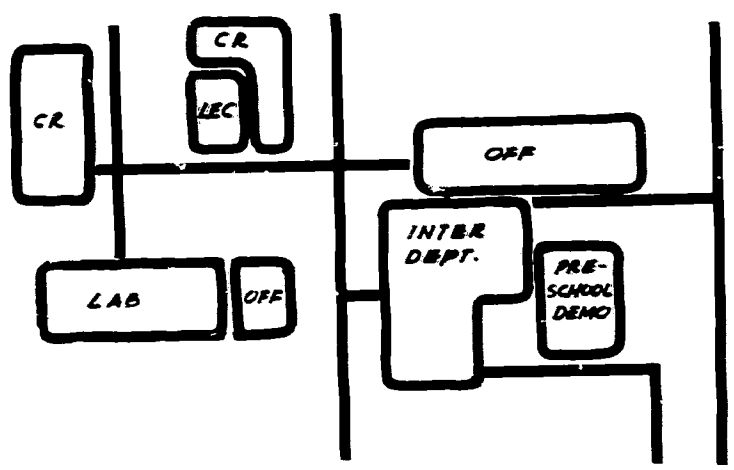
SCHEME 1





446 LEVEL

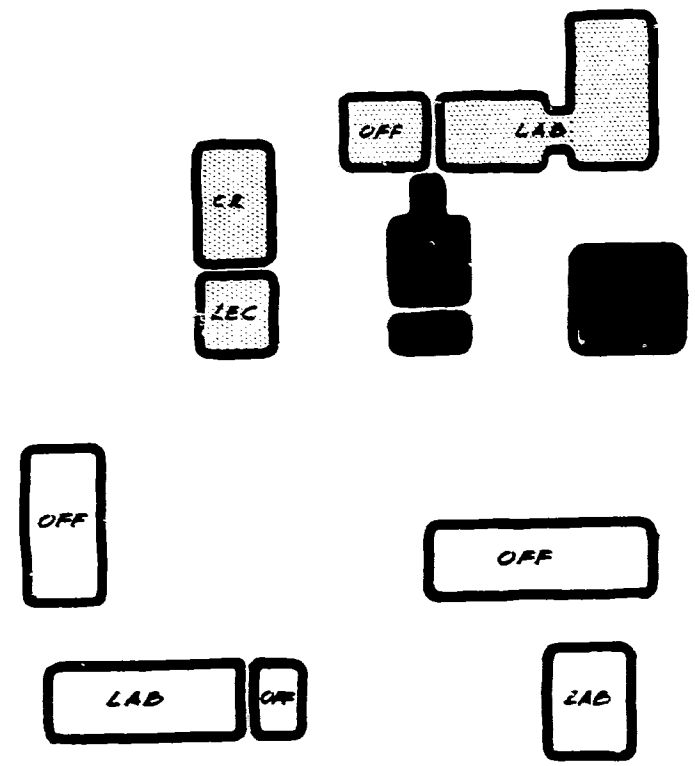


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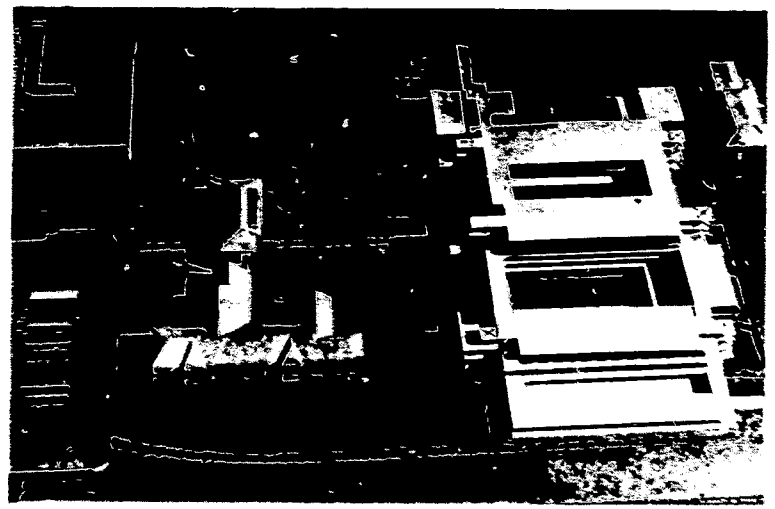
PLATE VI

CRITERIA EVALUATION - SCHEME 1

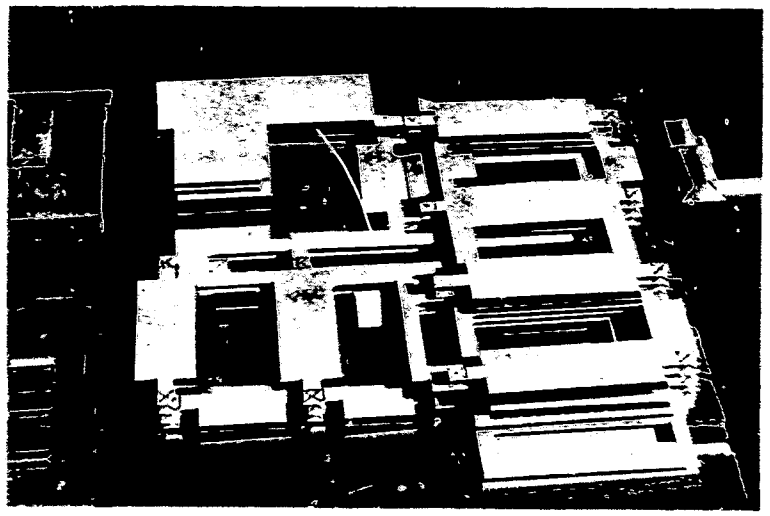
	ADVANTAGES	DISADVANTAGES
A. PHASING OF PROGRAMMED & ULTIMATE SPACE		1. Should a department experience unusual growth it would be necessary to expand into another building with resulting administration and circulation difficulties.
B. CIRCULATION, PEDESTRIAN & VEHICULAR	1. Service is provided to each building.	1. Pedestrian circulation between related buildings is unprotected. 2. Elevators would be required in each building over two stories. 3. Service access roads conflict with pedestrian circulation
C. FLEXIBILITY WITHIN & BETWEEN FUNCTIONAL AREAS.		1. Flexibility within each floor is limited to one functional type space. 2. Departments within schools are completely separated.

Criteria Evaluation - Scheme 1 (Continued)

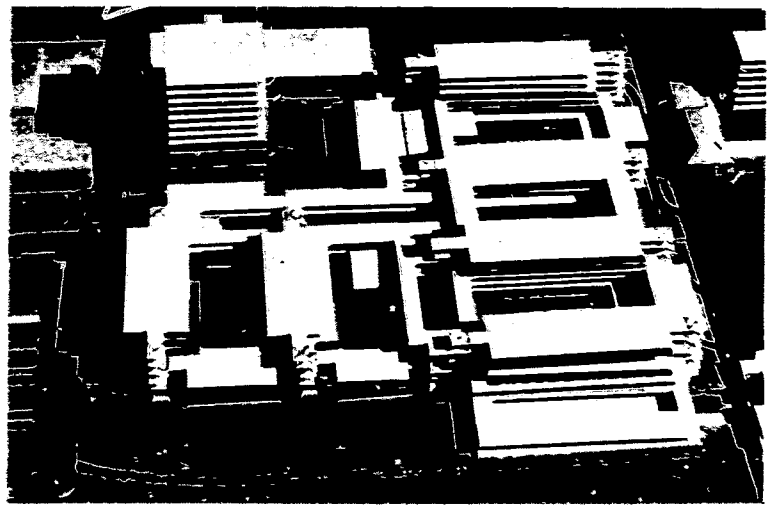
	ADVANTAGES	DISADVANTAGES
D. OPEN SPACE	1. Large areas good exposure to sun. 2. Ease of building recognition.	1. Monotony of type of space. 2. High ground coverage.
E. MECHANICAL IMPLICATIONS		1. Individual buildings require extensive utility tunnel construction in rocky area.
F. STRUCTURAL IMPLICATIONS	1. Ease of access to future construction.	1. Varying structural systems determined by each building leads to a lack of visual continuity.



First Phase



Second Phase



Ultimate Phase

SCHEME 2

Description:

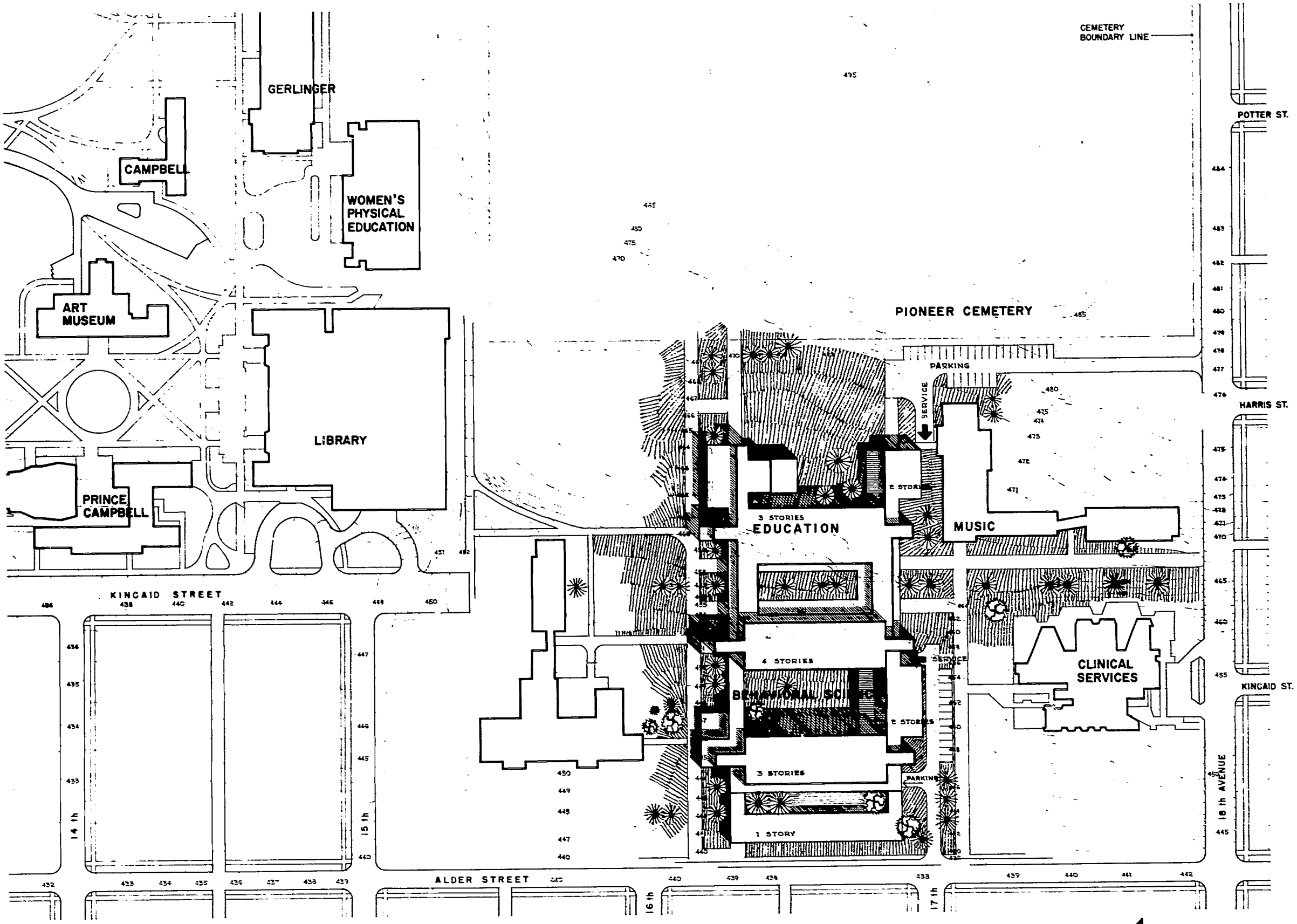
This scheme consists of a group of similar building elements interconnected by clearly defined covered walkway and stair structures. This arrangement forms and encloses a series of landscaped courtyards viewed from the structure above and serving areas at ground level. A major circulation axis formed by the extension of the Kincaid Street center line to 18th Avenue separates Education from the Behavioral Sciences. The major buildings house undergraduate and research laboratories, some with related offices, as well as general office space. Classrooms and some offices are located along the covered walkways which run perpendicular to and adjacent to the ends of the major building elements. Stairs, some with elevators, are located at the ends of the buildings and serve the covered walks at lower levels and enclosed corridors at upper levels. A major block of general offices span across the major axis separating Education and Behavioral Science providing an area permitting flexibility in use by either department. A second ground level circulation route extends from Alder Street East to the right of way at the cemetery boundary. The slope of the site along this path permits direct grade access to three levels allowing a more extensive distribution of high student occupancy needs.

Public use facilities, the Psychology Clinic and Preschool Demonstration Areas, are located at ground levels along the South edge of the complex and are accessible from parking areas with entrances from Alder Street and 18th Avenue.

Service areas appear at three perimeter locations with the interconnecting covered circulation facilitating distribution to the entire complex.

Incrementation is achieved in Phase Two by adding a building element next to the cemetery for the College of Education and two units for the Behavioral Sciences extending into the area now occupied by the present Education Building. Some vertical extension is required to Phase One construction near Alder Street. Incrementation to the ultimate phase is accomplished by adding levels to prior phases.

Below grade parking for 80 cars is provided off Alder Street in Phase One with 200 additional spaces provided under a future Clinical Services addition.



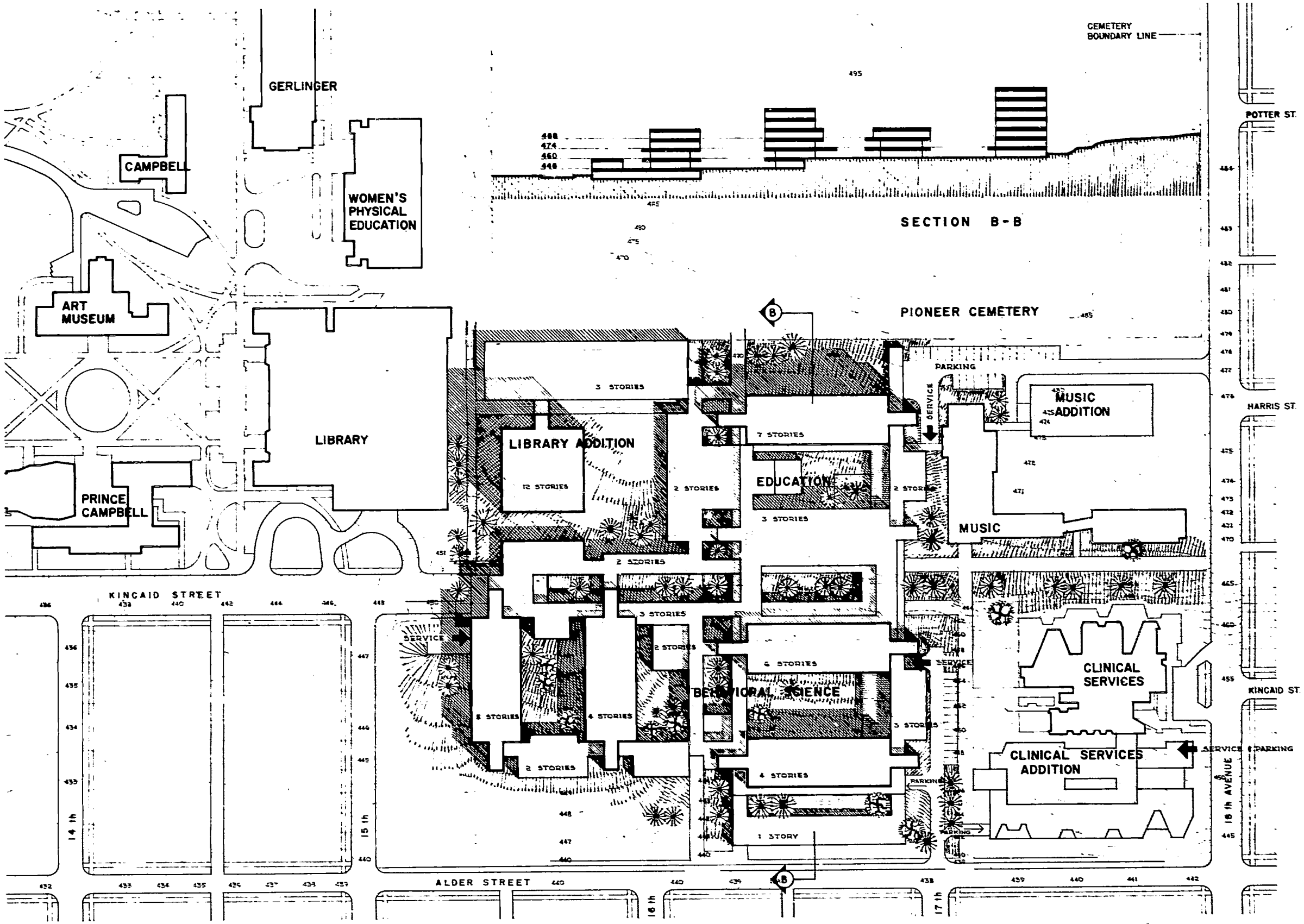
SCHEME 2

PHASE I
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE VII

0 100 200 300 FEET



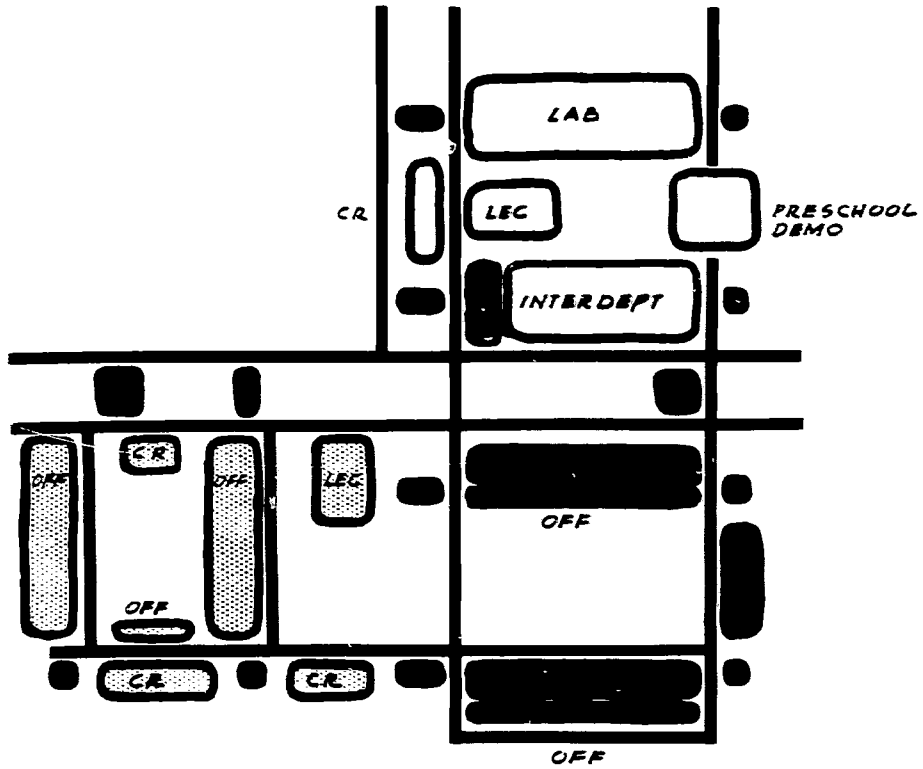
SCHEME 2

ULTIMATE PHASE
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE VIII

0 100 200 300 FEET



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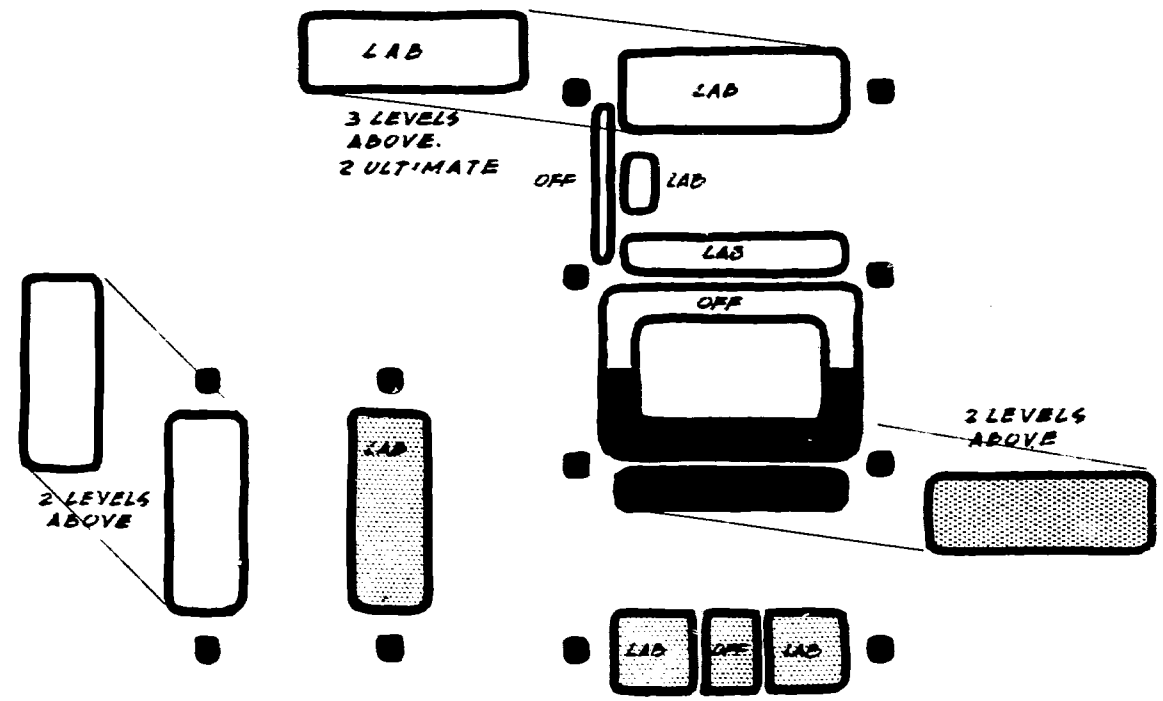

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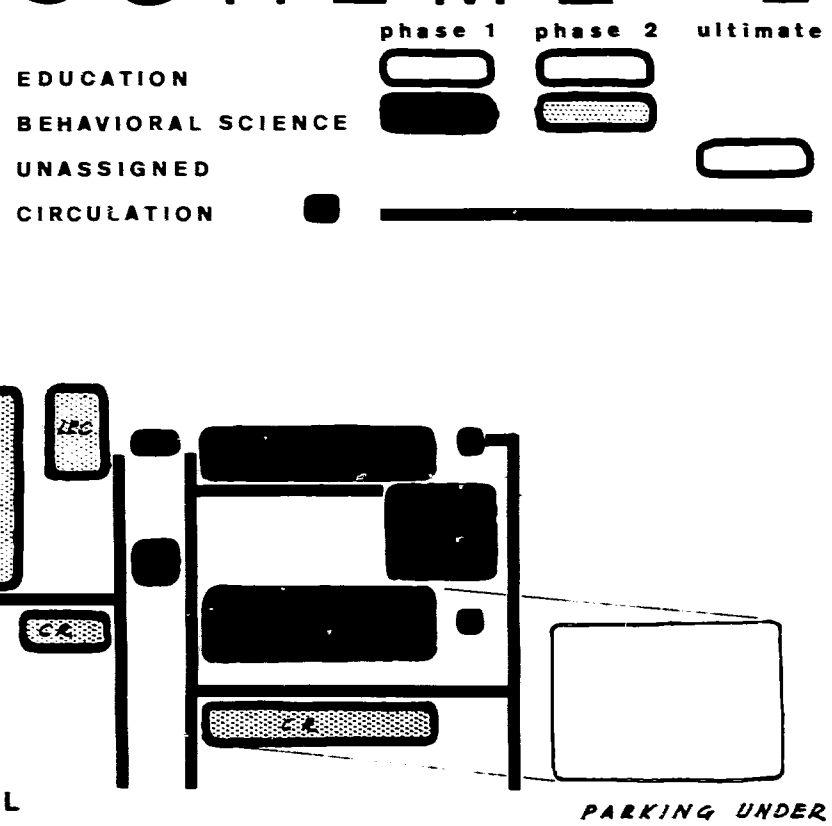
SCHEME 2



446 LEVEL

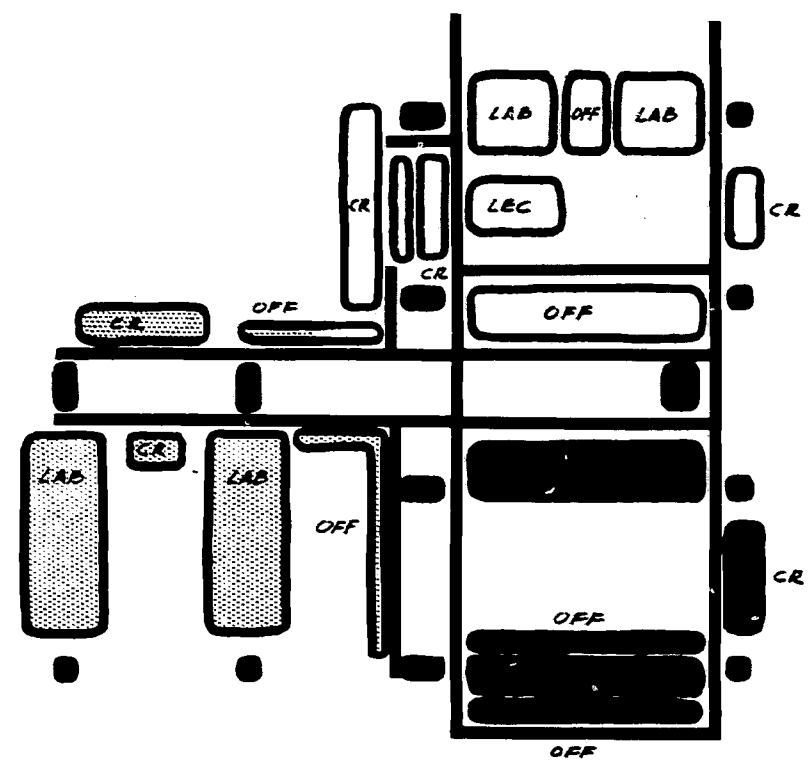


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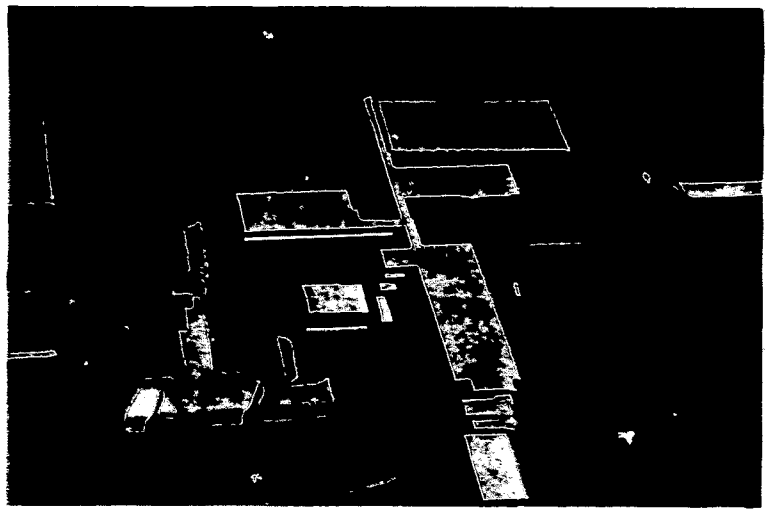
PLATE IX

CRITERIA EVALUATION - SCHEME 2

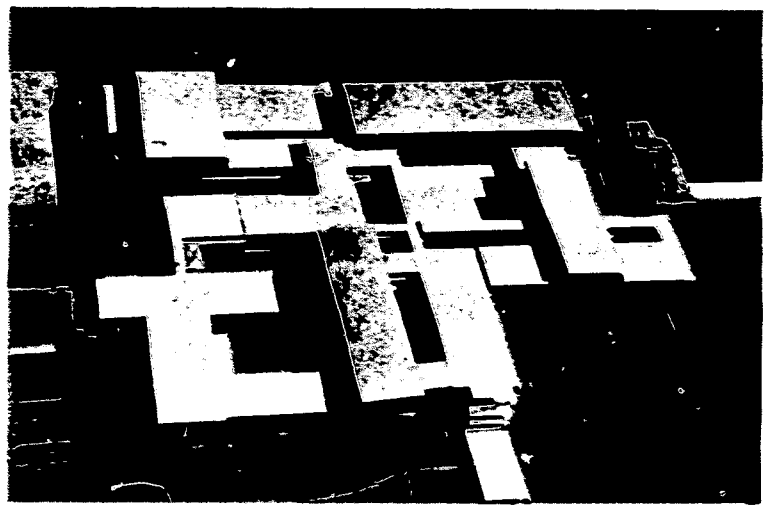
	ADVANTAGES	DISADVANTAGES
A. PHASING OF PROGRAMMED AND ULTIMATE SPACE	1. Retains identity of vertical building elements and circulation.	1. Limited accessibility for adding stories to some interior elements after Phase 2.
	2. Permits expansion in smaller than programmed increments.	2. Incrementation in smaller units than programmed would require attendant horizontal circulation to established stair locations.
B. CIRCULATION, PEDESTRIAN & VEHICULAR	1. Well defined vertical and horizontal pedestrian circulation.	
	2. Vehicular service to limited locations allows movement under cover both vertically and horizontally to all points.	
	3. Access to complex from grade at three levels.	
C. FLEXIBILITY WITHIN & BETWEEN AREAS.	1. Labs and related offices may expand into other vertical building elements and retain covered circulation.	1. Expansion of lab facilities beyond limits of contained building area is not immediately adjacent.
	2. General office space centrally located would permit expansion and contraction for both schools.	

Criteria Evaluation - Scheme 2 (Continued)

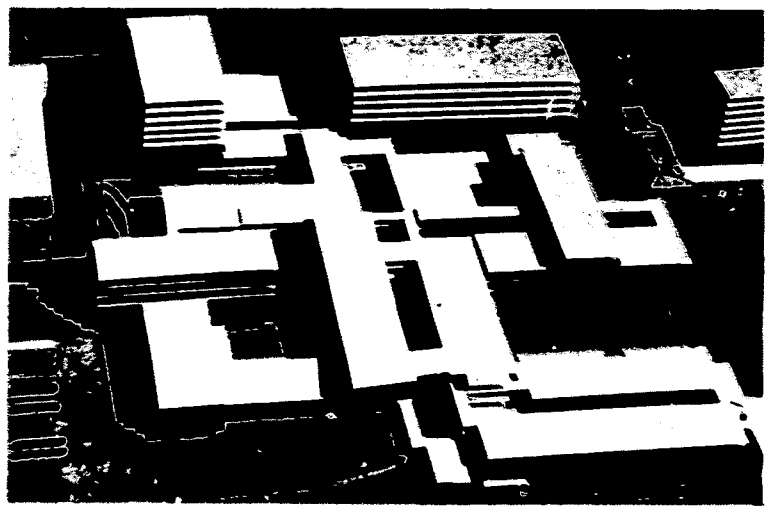
	ADVANTAGES	DISADVANTAGES
D. OPEN SPACE	1. Creates court spaces between building elements.	
	2. Extended vistas visible at ground levels under walkways above.	
	3. Main axis from Kincaid maintains open character.	
E. MECHANICAL IMPLICATIONS	1. Uniformity of building elements provides similar mechanical units and duct layouts.	
	2. Connected buildings permit minimum tunnel construction.	
F. STRUCTURAL IMPLICATIONS	1. Limited number of building forms facilitate framing.	1. Much of connecting covered circulation requires variance from basic structural module. Bridge rather than building structure.



First Phase



Second Phase



Ultimate Phase

SCHEME 3

Description:

This alternative provides an informal arrangement of building spaces, interconnected at the lower four levels along covered walkways with some access directly into teaching spaces. Laboratories, undergraduate and research, and offices are contained within the department areas with classrooms and interdepartmental areas located at the perimeter.

As in the previous schemes Education and Behavioral Sciences are basically separated by the Kincaid Street axis with a secondary axis extending from Alder Street East and joining a right of way at the boundary of the cemetery. Most stairways, some with elevators,are located along the axis while others are adjacent. The sloping site allows grade access to three levels permitting broad placement of high student density areas.

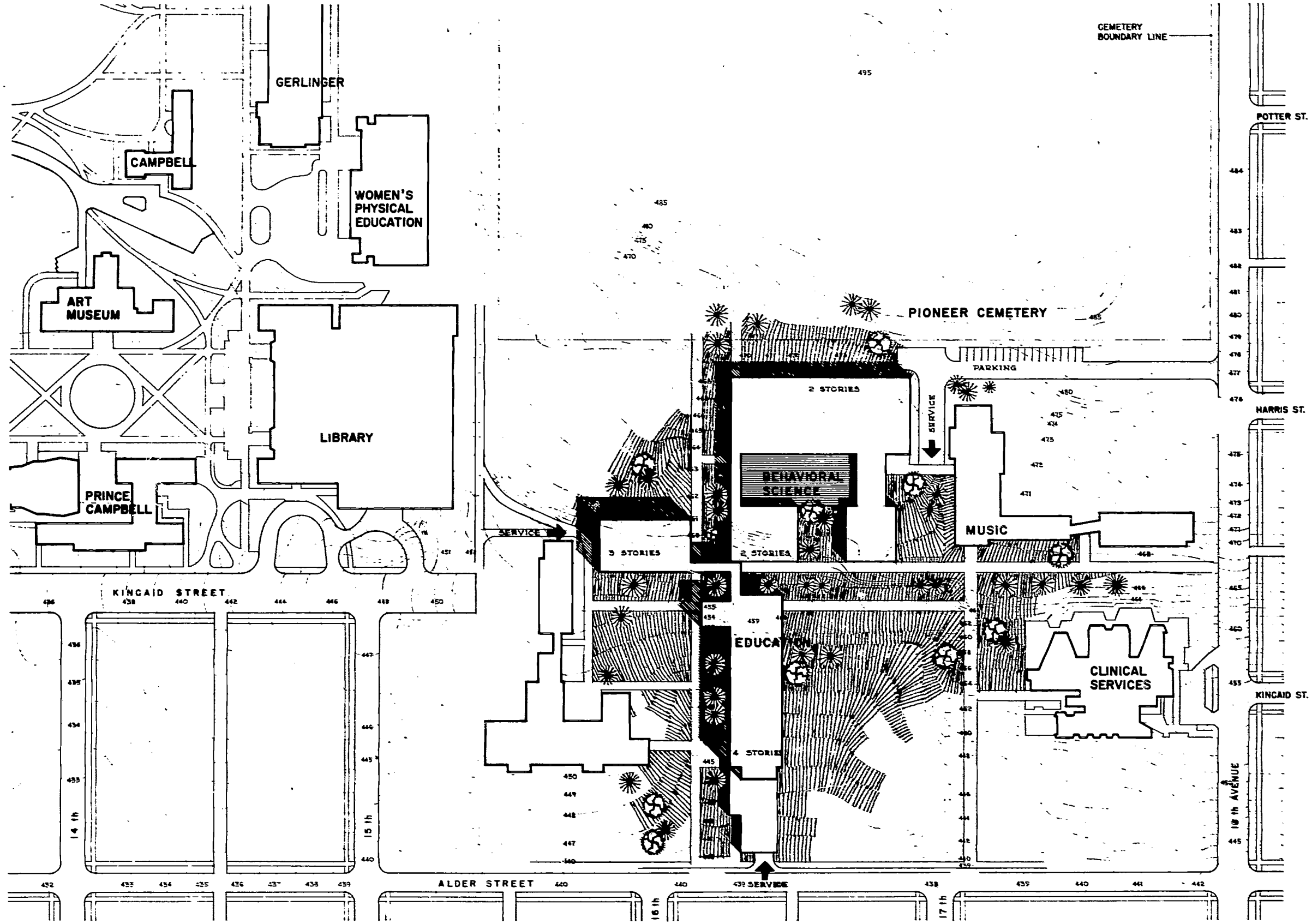
The building configuration defines a number of open spaces of varying size with some open areas extending into others through building separations at ground level. Some open spaces serve as circulation at ground levels. A roof terrace is provided in some areas extending useable open space above grade.

The public use areas are located at ground levels. The Psychology Clinic is served by a parking area off of 18th Avenue. The Preschool Demonstration Area is served from Kincaid Street and somewhat handicapped by the retention of the present Education Building in Phase One.

Service areas are located at three perimeter locations and covered interconnecting elements provide for distribution to the entire complex.

Incrementation to Phase Two requires major construction to the North and South of the Phase One building along with several vertical additions. Ultimate development requires vertical additions to elements near the cemetery and Kincaid Street together with a connecting unit along Alder Street.

Two levels of parking are located under the ultimate addition near Alder Street. Access to one level is from Alder, the other from 18th Avenue. This parking would be tied together with that to be located under a future Clinical Services addition at the corner of 18th and Alder.



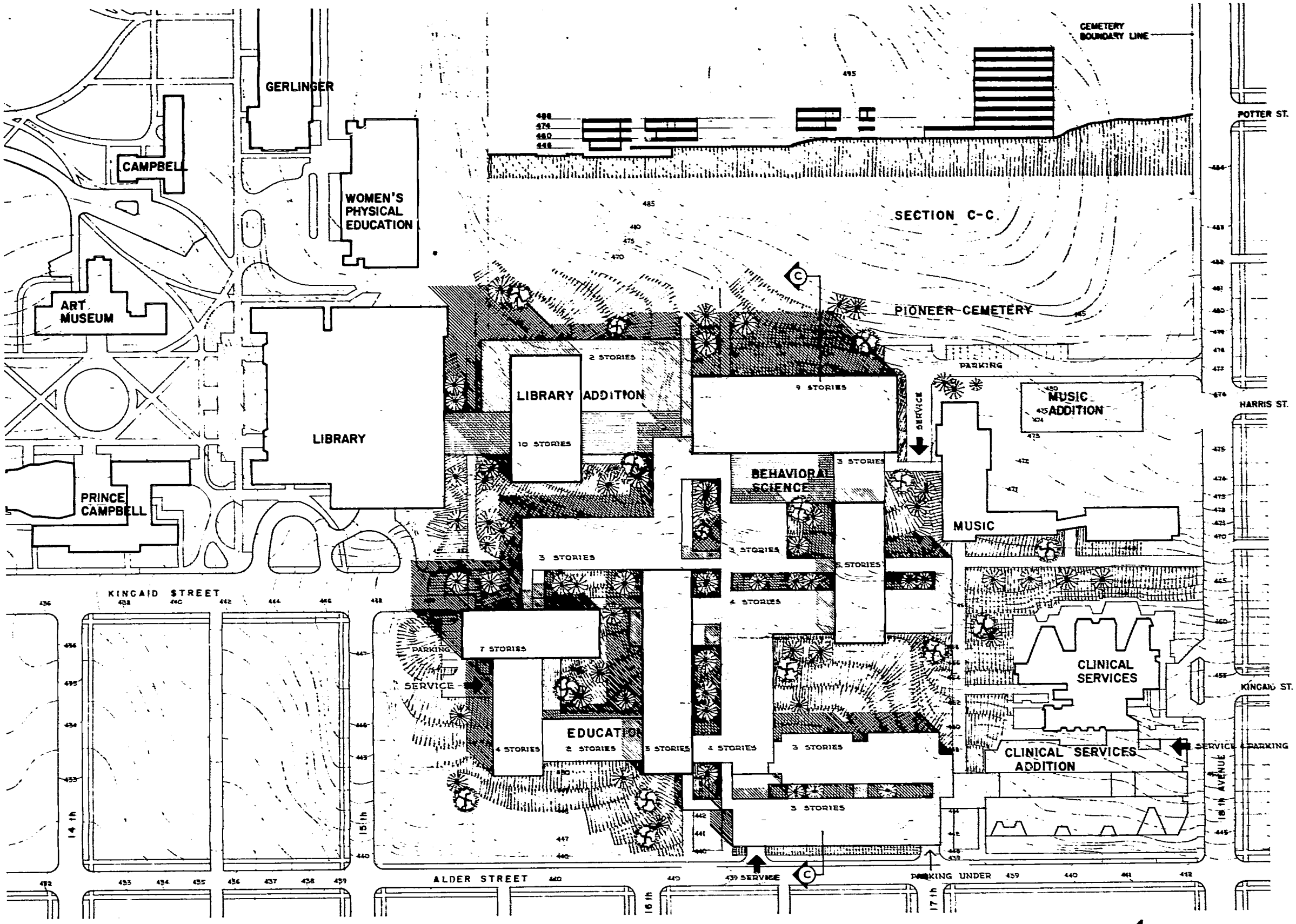
SCHEME 3

PHASE I
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE X

0 100 200 300 FEET



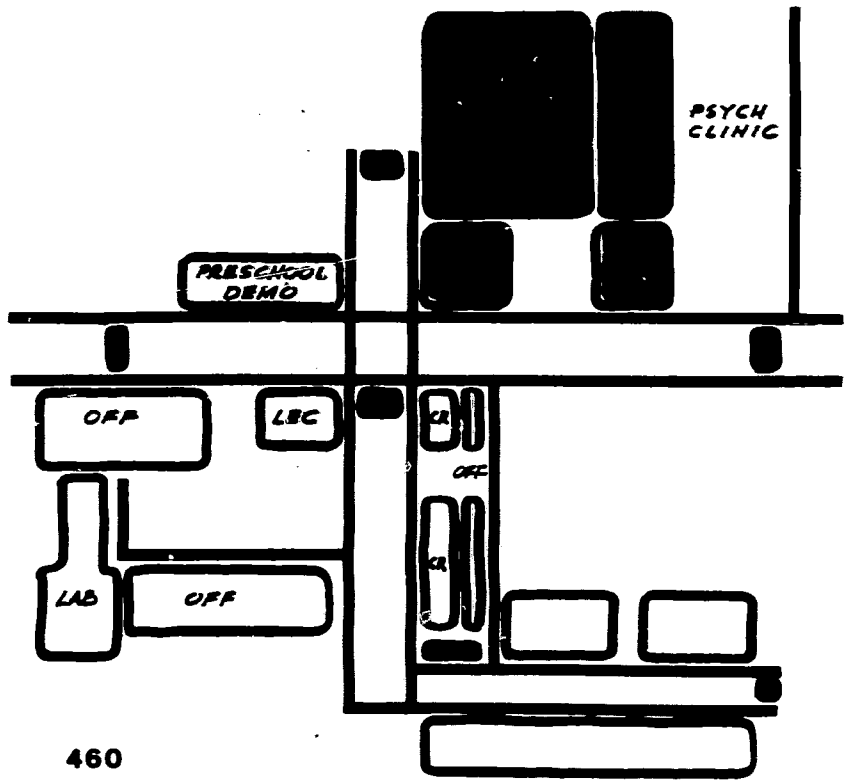
SCHEME 3

ULTIMATE PHASE
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE XI

0 100 200 300 FEET



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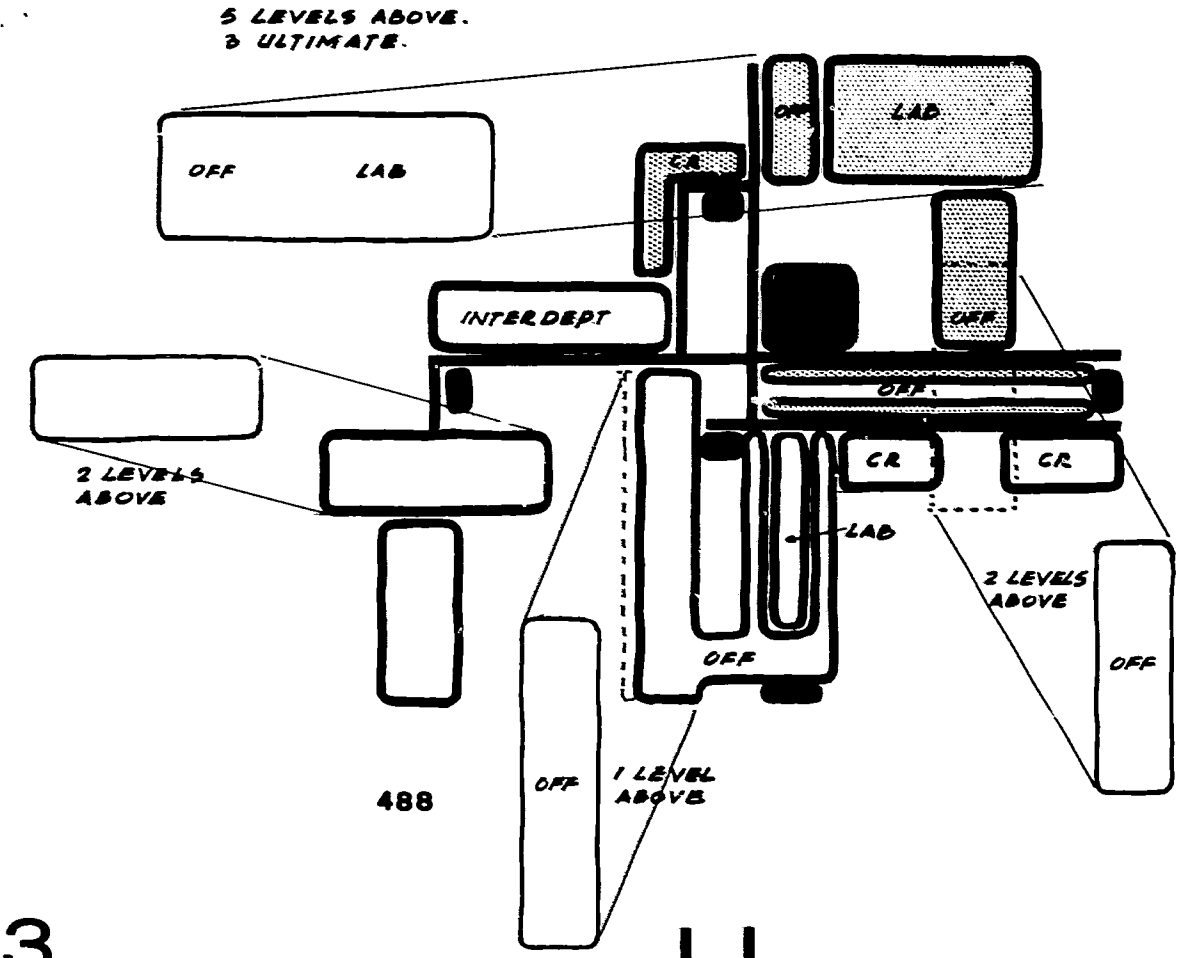

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SCHEME 3

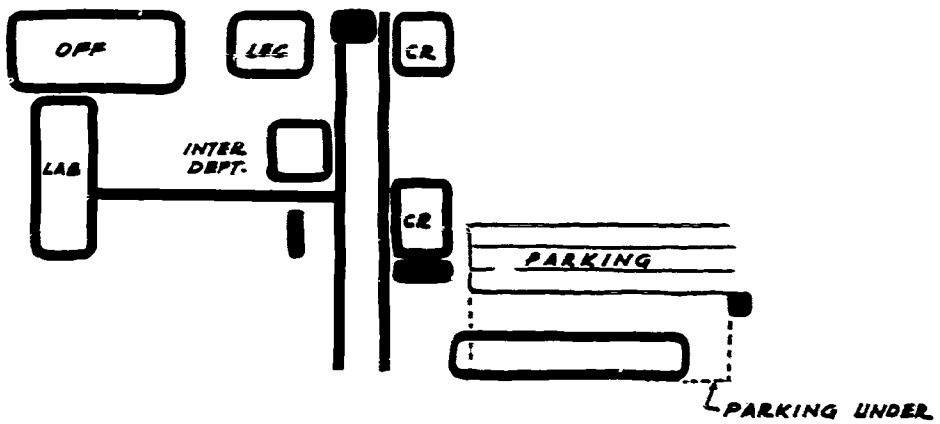
phase 1 phase 2 ultimate

EDUCATION

BEHAVIORAL SCIENCE

UNASSIGNED

CIRCULATION



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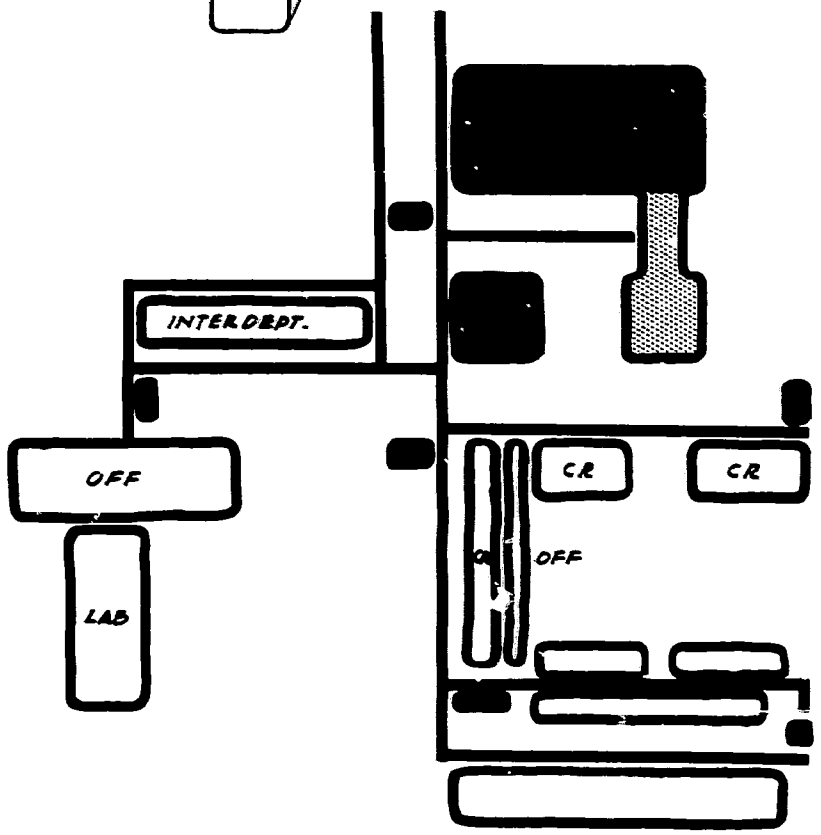

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PLATE XII

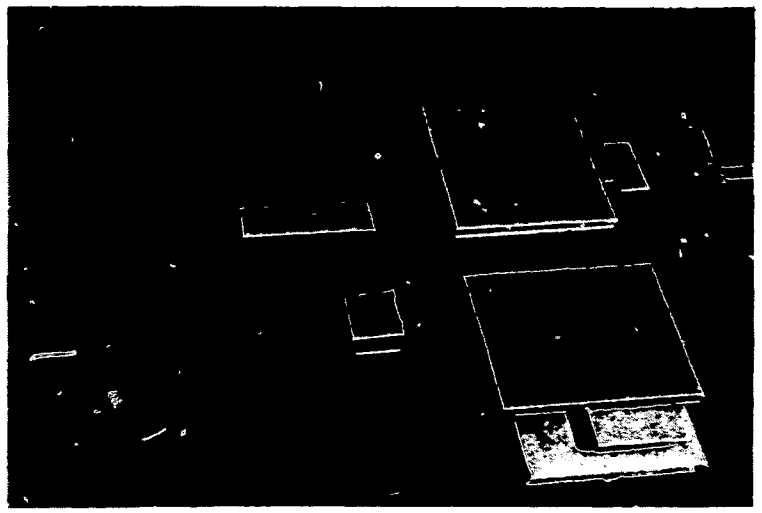
CRITERIA EVALUATION - SCHEME 3

	ADVANTAGES	DISADVANTAGES
A. PHASING OF PROGRAMMED AND ULTIMATE SPACE	1. Permits expansion in smaller than programmed increments. 2. Large amounts of Phase Two and ultimate space is easily incremented vertically at the East edge of the complex.	1. Requires that Phase Two construction be accomplished on all sides of Phase One. 2. Presents an incomplete appearing complex at the end of Phase One. 3. Incrementation in smaller units than programmed would require attendant horizontal circulation to established stair locations.
B. CIRCULATION, PEDESTRIAN AND VEHICULAR.	1. Pedestrian circulation completely covered. 2. Access to complex from grade at three levels. 3. Vehicular service to limited locations allows movement under cover both vertically and horizontally.	1. Major vertical circulation not uniformly located - some interior, some exterior.

Criteria Evaluation - Scheme 3 (Continued)

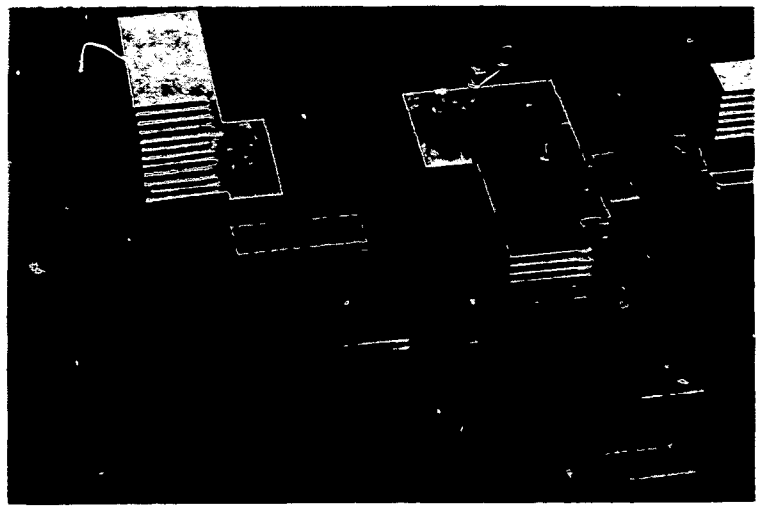
	ADVANTAGES	DISADVANTAGES
C. FLEXIBILITY WITHIN AND BETWEEN AREAS	1. Flexibility horizontally not limited as areas along circulation routes are closely related. 2. Number of large elements have degree of internal flexibility.	
D. OPEN SPACE	1. Variety in shapes of open space. 2. Extended vistas visible at ground levels under buildings above.	
E. MECHANICAL IMPLICATIONS	1. Connected building elements permit minimum amount of tunnel work	
F. STRUCTURAL IMPLICATIONS		1. Some open spaces extend two and three stories to a floor level requiring tall laterally unsupported columns. 2. Building sections less standardized, requiring more complex framing.

SCHEME 4



First Phase

Second Phase



Ultimate Phase

Description:

This approach provides large areas of floor space containing an intermix of laboratories, offices and classrooms. The assignable areas within the large building mass are formed by interior double loaded corridors. Stairways are also interior. Large amounts of assignable space will be totally inside. Circulation to the major building entrances is on grade directly from the two pedestrian axes, which also form the basic open space of the plan. This is reflected in the scheme having a high percentage of building ground coverage. An office element accessible to each of the two schools bridges the extended axis of Kincaid Street.

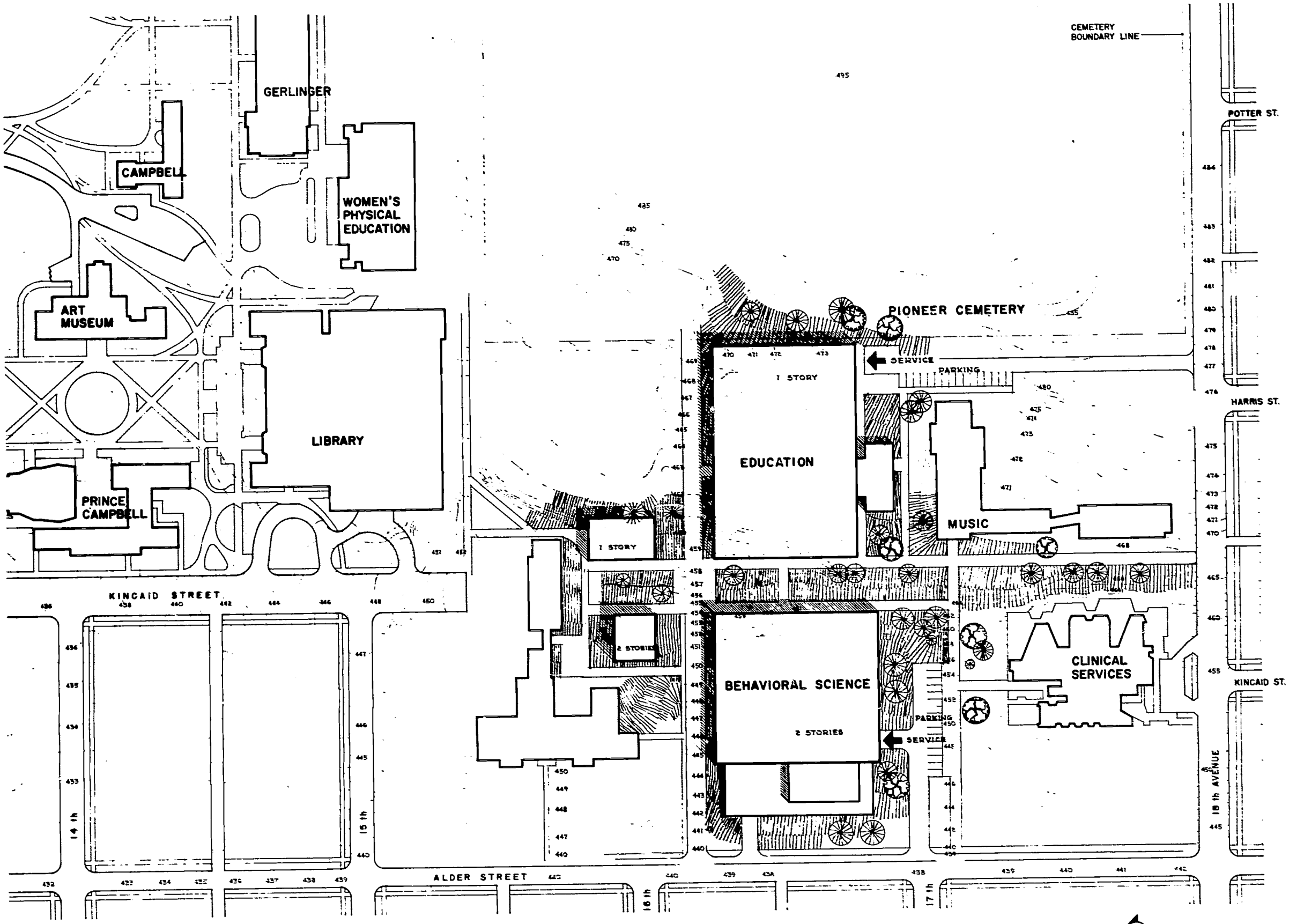
The College of Education and Department of Behavioral Sciences are again separated by the Kincaid Street axis extended to 18th Avenue. The Behavioral Sciences bridge a secondary axis from Alder East to the cemetery boundary.

The public use areas, Psychology Clinic and Preschool Demonstration area are at ground levels and project from the major building masses of their respective departments. Parking areas are located near each of these facilities. Interdepartmental facilities, i.e. audiovisual and data processing are located in a smaller building element to the North of the complex.

Service areas are located at each of the three major building masses and offer internal distribution.

Incrementing to Phase Two requires, in addition to a major structure to the North, a one level vertical addition to the initial building mass. The connections to the three major structures will occur at this time. The ultimate development of this scheme would be accomplished by adding one level to the entire structure as well as the construction of vertical tower elements above. These towers would contain low density occupancy such as office and research.

A covered parking area for 80 cars would be incorporated in Phase One with access from Alder. This would be augmented by 200 spaces under a future addition to the clinical services area.



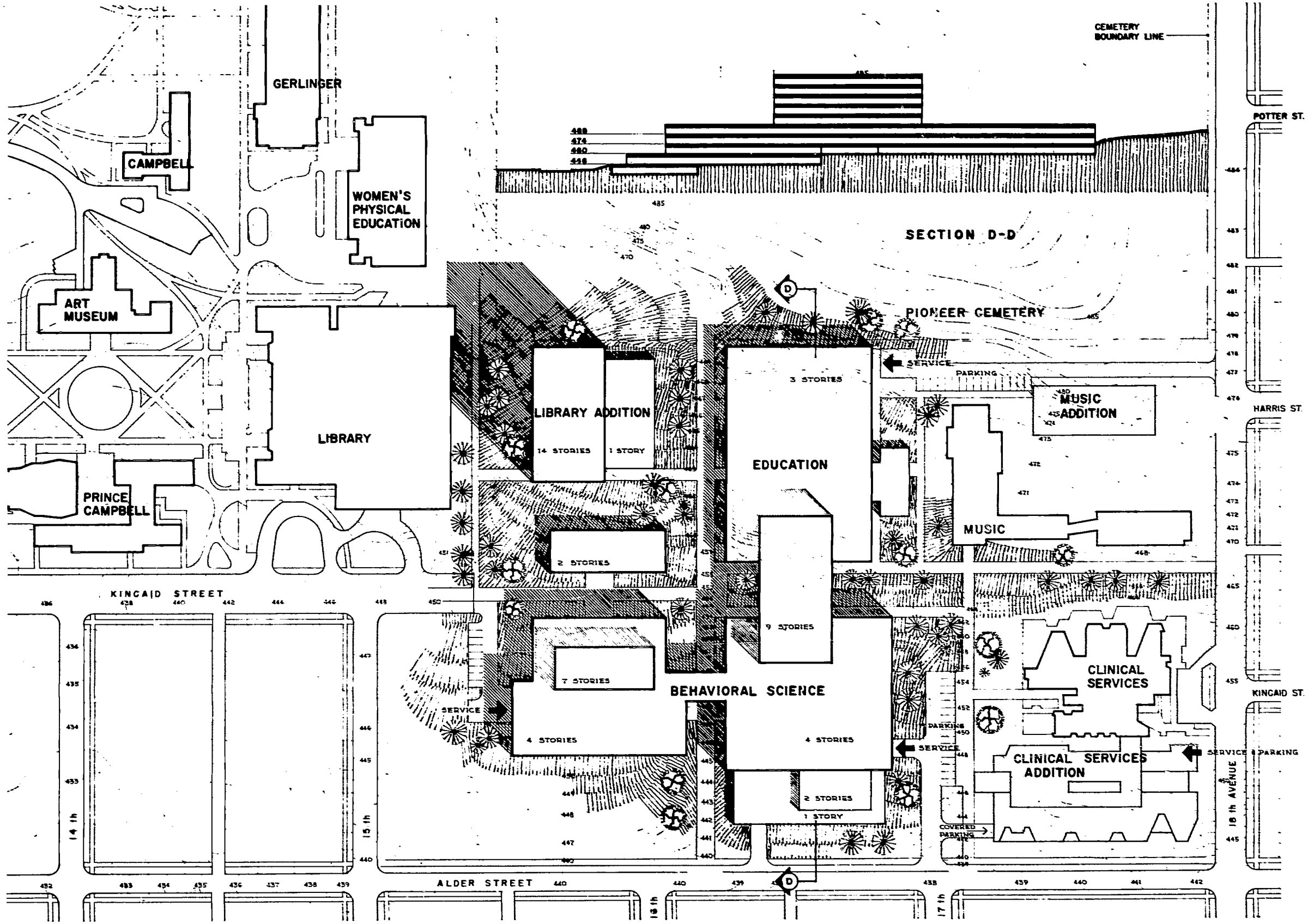
SCHEME 4

PHASE I
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE XIII

0 100 200 300 FEET



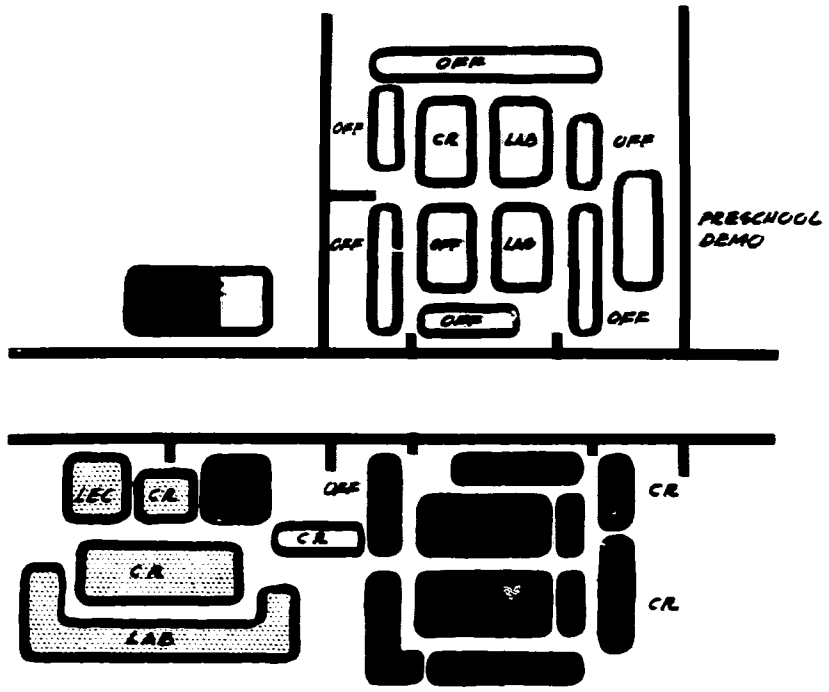
SCHEME 4

ULTIMATE PHASE
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE XIV

0 100 200 300 FEET



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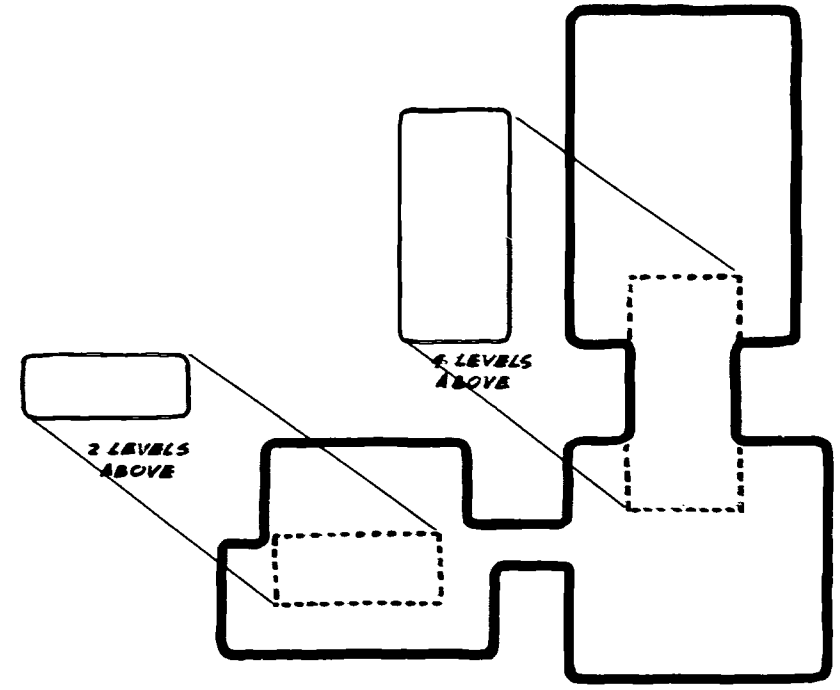

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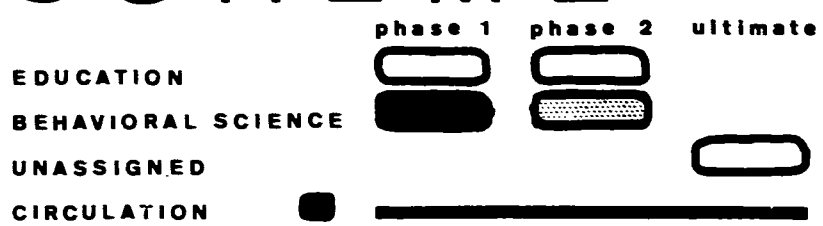
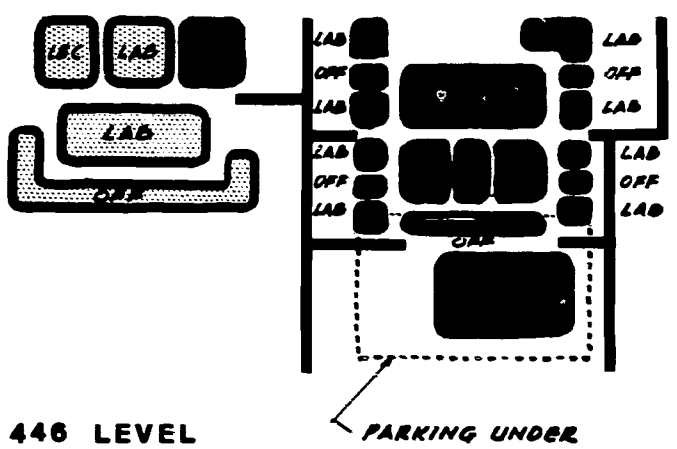
SCHEME 4





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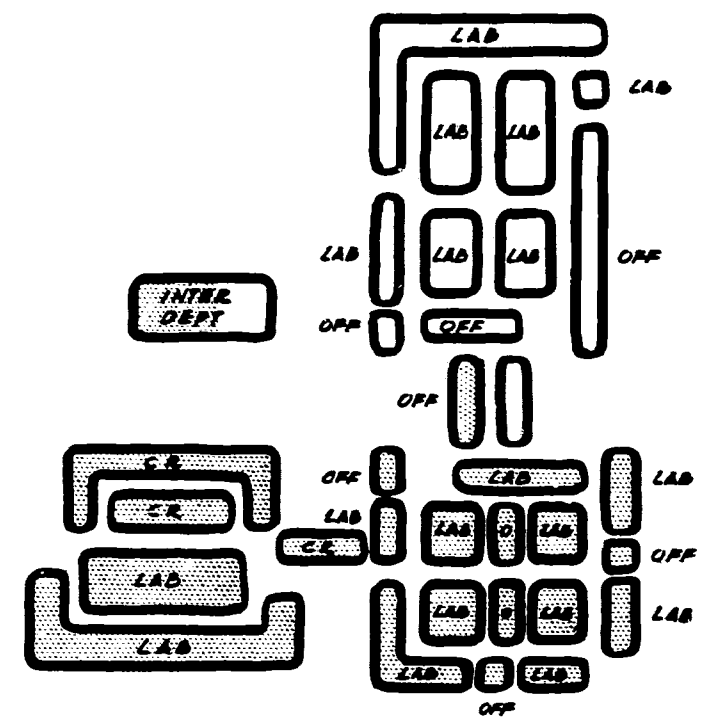

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PLATE XV

CRITERIA EVALUATION - SCHEME 4

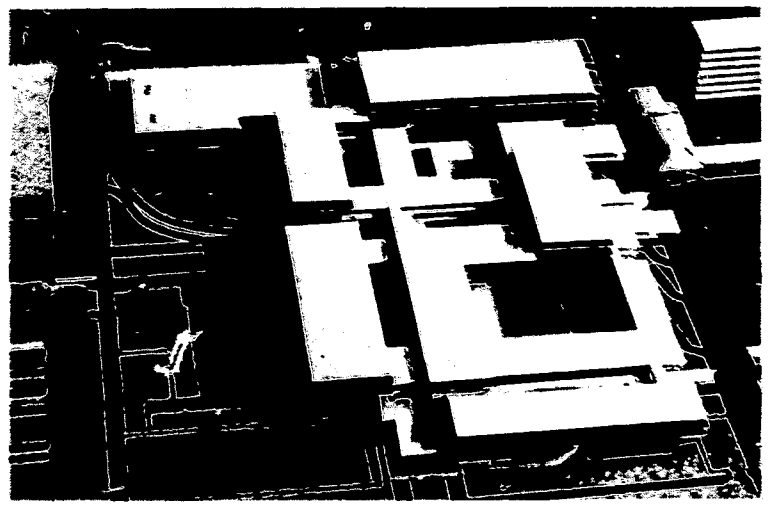
	ADVANTAGES	DISADVANTAGES
A. PHASING OF PROGRAMMED AND ULTIMATE SPACE.		1. Requires major vertical expansion in second and again in ultimate phase. 2. Limited capacity for incrementation in units smaller than programmed requirement.
B. CIRCULATION, PEDESTRIAN & VEHICULAR	1. Pedestrian circulation completely enclosed. 2. Access to complex from grade at three levels. 3. Vehicular service to each building element.	1. Vertical circulation not clearly defined.
C. FLEXIBILITY WITHIN & BETWEEN AREAS.	1. Large loft type area permits extreme flexibility.	
D. OPEN SPACE		1. High ground coverage. 2. No variety of spaces.

Criteria Evaluation - Scheme 4 (Continued)

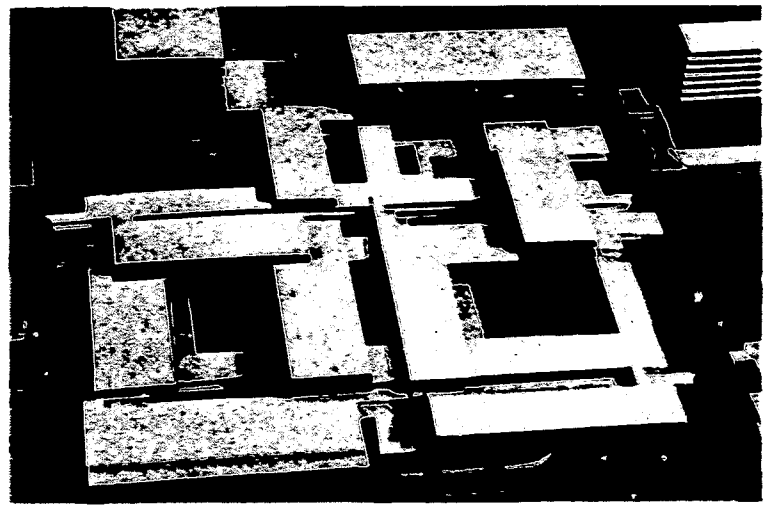
	ADVANTAGES	DISADVANTAGES
E. MECHANICAL IMPLICATIONS	1. Simplified riser and distribution system.	
F. STRUCTURAL IMPLICATIONS	1. Simplified framing pattern.	1. Large areas lend themselves to expansion and contraction of materials requiring costly connections.

SCHEME 5

First Phase



Second Phase



Ultimate Phase

Description:

This scheme has resulted from the advantages suggested by the others. The College of Education and Department of Behavioral Science are contained in areas separated by an axis extended from Kincaid Street to 18th Avenue. The building elements within these areas are more uniform in character and contain the related laboratory and office space with classrooms located centrally for joint use. A general office area overlaps the two schools providing a degree of flexibility in assignment of space. A large building element near the cemetery provides some of the loft type space evident in Scheme Four in a less massive statement.

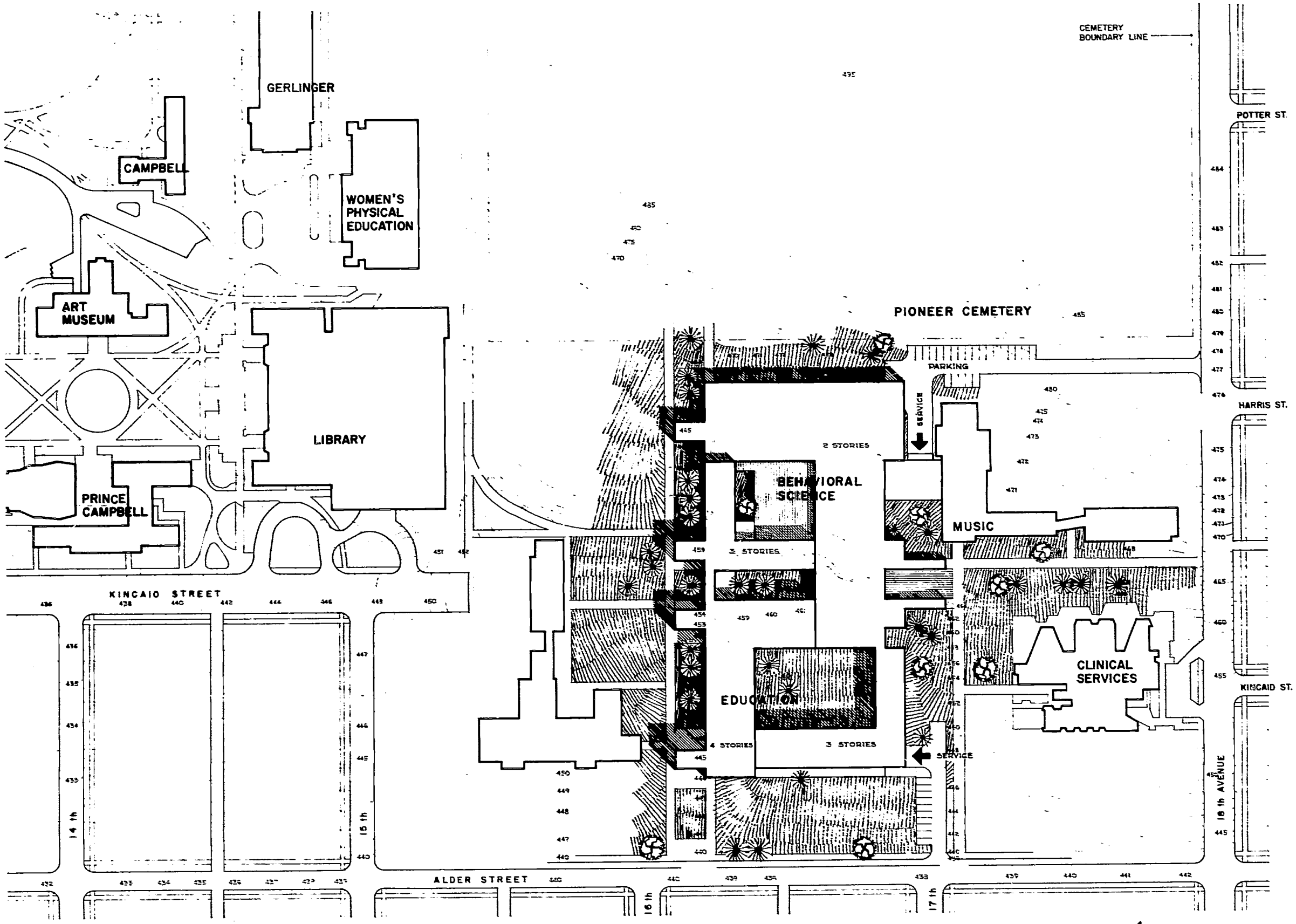
Public service facilities are at ground level and have access from parking. These are located within their related academic areas.

As in the previous schemes a pedestrian axis is established from Alder Street East to an alignment with a right of way at the boundary of the cemetery. Well defined covered circulation parallels the two axes with a strong emphasis of stair elements, some containing elevators. This circulation becomes an extension of interconnecting assignable building spaces. The sloping site and parallel circulation provides ground access at three levels permitting a variety of high occupant load locations.

The configuration of the building creates a variety of open spaces interconnected at the ground level through selective openings between buildings. This provides a rather low area of actual ground coverage. These landscaped spaces are viewed from the structures above and provide secondary circulation at ground levels.

Phase One presents a unified building complex. The incrementation to Phase Two requires horizontal expansion to the North and West in addition to two elements of vertical expansion to Phase One construction. Circulation is within these vertical elements. Ultimate development is achieved with a further horizontal expansion to the North and a vertical expansion near the cemetery. Service areas appear at three perimeter locations with the interconnecting elements facilitating distribution to the entire complex.

Covered parking for 83 cars is provided under the ultimate development to the North with access from Alder Street. This could be on grade until such time as the area is developed. As in all other schemes parking for 200 cars could be provided under a future addition to the Clinical Services Building.



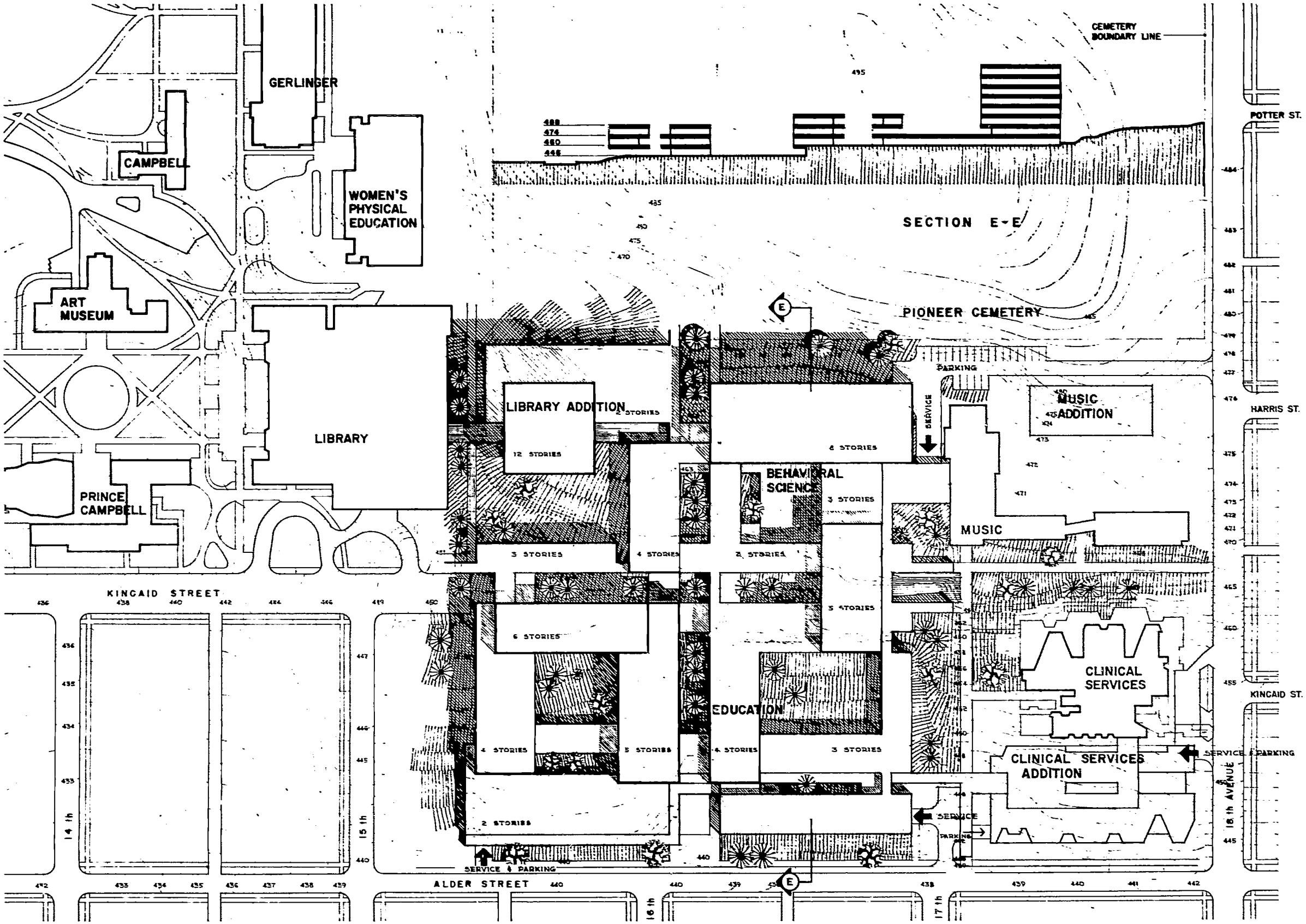
SCHEME 5

PHASE I
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE XVI

0 100 200 300 FEET



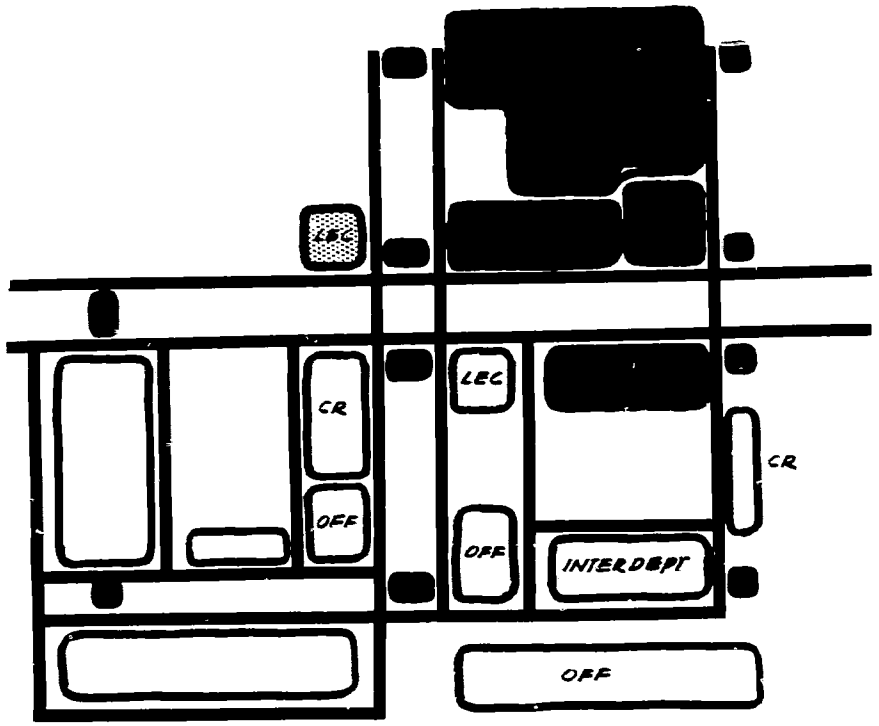
SCHEME 5

ULTIMATE PHASE
S. W. QUADRANT UNIVERSITY OF OREGON

NORTH

PLATE XVII

0 100 200 300 FEET



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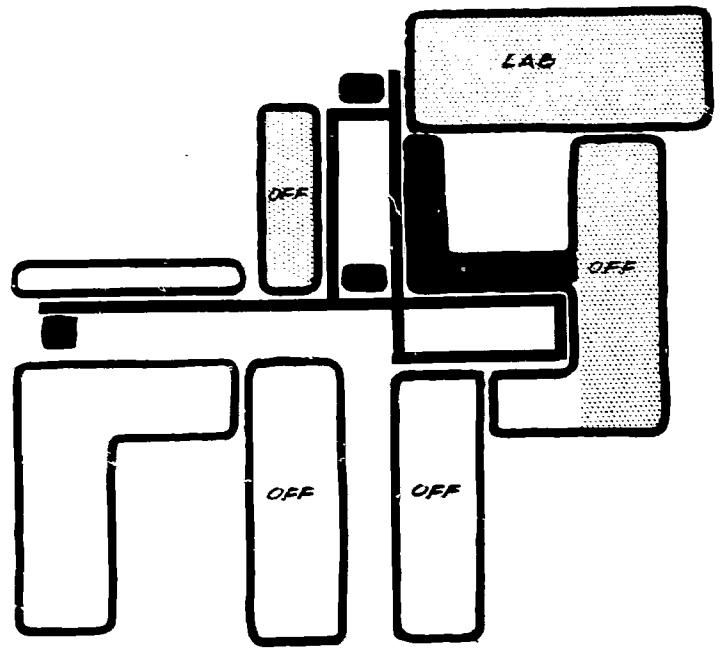

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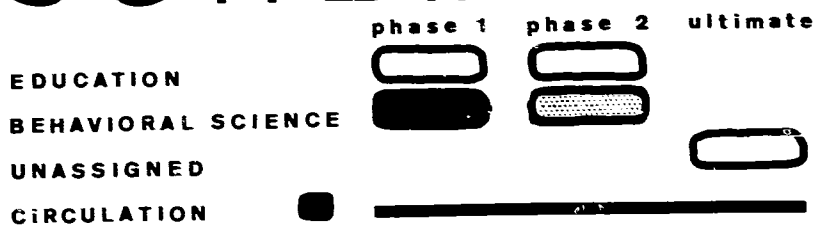
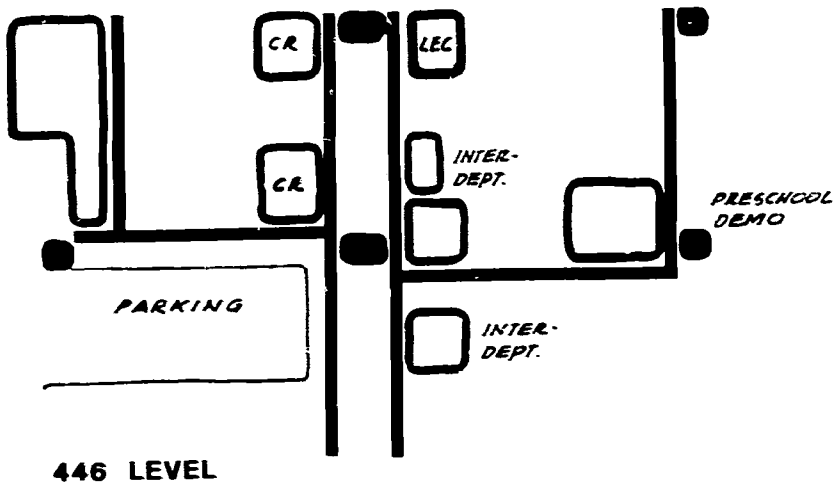
SCHEME 5





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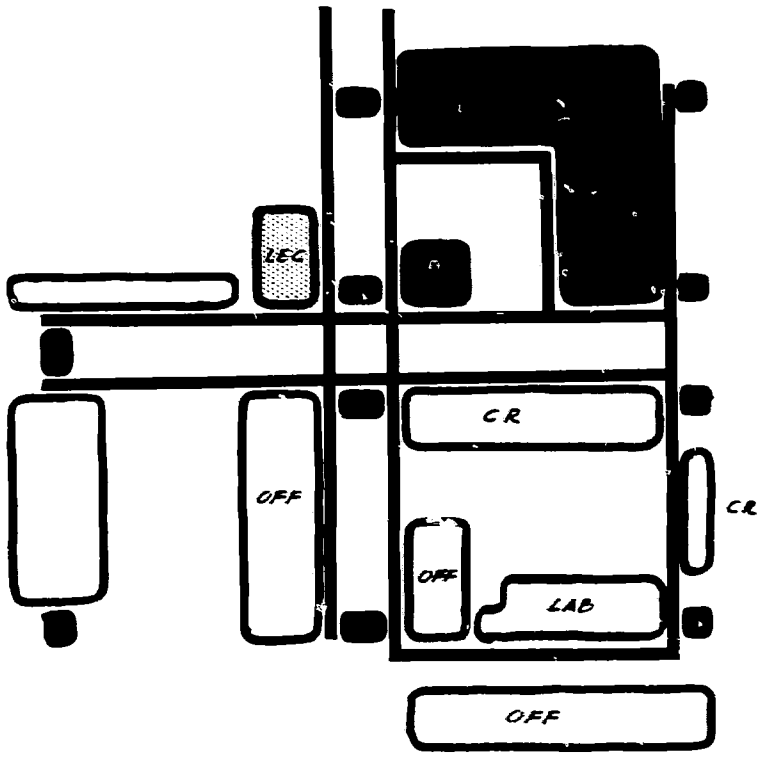

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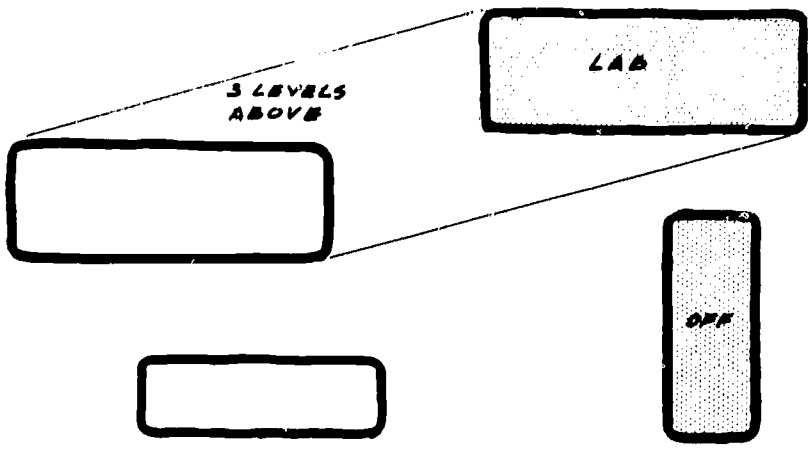
PLATE XVIII



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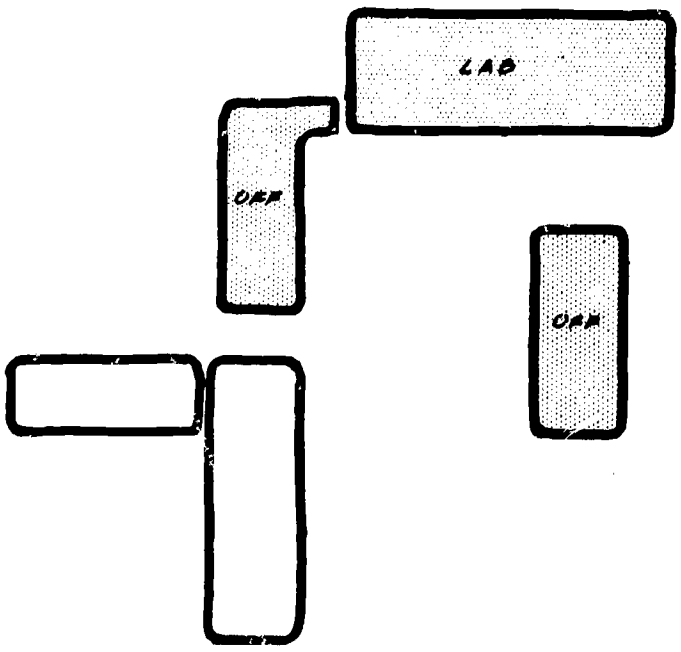

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PLATE XIX

CRITERIA EVALUATION - SCHEME 5

	ADVANTAGES	DISADVANTAGES
A. PHASING OF PROGRAMMED AND ULTIMATE SPACE.	1. Provides a complete appearing complex at completion of Phase One. 2. Incrementation occurs primarily all to the North. 3. Permits expansion in smaller than programmed increments.	1. Incrementation in smaller units than programmed would require attendant horizontal circulation to established stair locations.
B. CIRCULATION, PEDESTRIAN & VEHICULAR	1. Well defined vertical and horizontal circulation. 2. Access to complex from grade at three levels. 3. Limited service locations permit vertical and horizontal movement under cover.	
C. FLEXIBILITY WITHIN & BETWEEN FUNCTIONAL AREAS.	1. Horizontal flexibility enhanced by proximity of each building element connected by covered circulation. 2. Number of large elements have a degree of internal flexibility.	

Criteria Evaluation - Scheme 5 (Continued)

	ADVANTAGES	DISADVANTAGES
D. OPEN SPACE	1. Variety in shapes of open spaces. Extended vistas at ground levels through building breaks.	
	2. Open space retained vertically along major axes.	
E. MECHANICAL IMPLICATIONS	1. Connected building elements permit minimum amount of tunnel work.	
F. STRUCTURAL IMPLICATIONS	1. Similar building sections permit standard framing plans.	

APPENDIX 1

STUDY PROGRAM FOR SITE PLANNING AND DEVELOPMENT PHASING FOR THE SCHOOL OF EDUCATION AND THE CLASSROOM, OFFICE, TEACHING CENTER FOR BEHAVIORAL SCIENCES.

The site for the proposed School of Education and the Office, Classroom and Teaching Center for Behavioral Sciences (Anthropology, Psychology, and Sociology) is generally referred to as the southwest quadrant. It is bounded on the East by the Cemetery and Music School; on the North by the existing Education Building and the Library; on the South by 18th Avenue and on the West by Alder Street.

Because both will share the same basic site, it is essential that these two projects be subject to the closest possible coordination. For instance, both Education and the Behavioral Sciences will make joint use of their respective classrooms. Future building expansion (vertically as well as horizontally), vehicular and pedestrian access and egress, intra-campus circulation, preservation and use of open space, off-street parking, as well as many other factors must be coordinated in a most fundamental way in order to obtain an efficient and harmonious long term utilization of the total site.

The currently proposed Behavioral Science and Education buildings are only the first of several phases of construction necessary to meet the total space requirements of their respective functions. It is essential, therefore, that the design of the first phase take full account of the future programs of both the Behavioral Sciences and the School of Education. This will necessarily entail expansion of most departmental functions through a systematic program of building extensions and additions, all directed toward the fulfillment of total education programs within a fully integrated overall design. The new buildings must, therefore, not only be capable of accepting future additions, but the space within must be able to accommodate changing assignments in many areas as new increments are added.

In order to insure a high level of coordination at the outset, and to determine the best utilization of the site, the architect will propose and analyze a series of alternative building concepts for the future development of the entire southwest quadrant, as a preliminary step to the architectural design of both the School of Education and the Classroom, Office, Teaching Center for the Behavioral Sciences. It is intended that this study should explore the basic potentialities of the site, and the alternative building configurations which it would accommodate, in the light of the specific demands which will be put upon it by Education, the Behavioral Sciences, the Library, Clinical Services and Music. It is also intended that this should be a basic study with particular emphasis on the contrasting of alternative strategies rather than the visual design of individual buildings. Presentations should be diagrammatic and schematic and should not attempt to portray architectural images. A study model (at 1" = 50') of the site and the adjacent academic campus that can be manipulated to show the interplay

of various components as well as the total complex, will be required as a principal means of illustrating and evaluating the alternative proposals.

Each of the proposals should be designed to respond to the following major considerations and should be analyzed accordingly:

A. Volumetric - Density Analysis. Except for the site that has been designated for the Clinical Services Building and its future additions, all of the remaining area of the southwest quadrant (including the area occupied by the Vet's Dorms which will be razed) should be considered as ultimately buildable--the tennis courts and parking areas should be considered as temporary functions which will eventually be relocated, but which may or may not be retained through the initial construction phase. This portion of the study is intended to explore the full potential of the southwest quadrant of the campus in order to determine its total building capacity with varying levels of building density. The functional and area requirements of the Behavioral Sciences, Education, the Library, Music, and Clinical Services will be examined and compared with the net usable area to be provided by each alternative building concept, to determine if, and to what extent, the southwest quadrant has the capacity for additional functions beyond those which are presently programmed for it. This phase of the study should also demonstrate the following basic characteristics of each alternative proposal:

1. Establishment of basic future building space envelopes (including recommended building heights) with tentative functional assignments to Psychology, Anthropology, Sociology, Education, Clinical Services, Library, and, if possible, other undesignated functions.

2. Definition of future quadrangles, malls, or other permanent open areas.

3. Establishment of a basic vertical and horizontal circulation plan including pedestrian and vehicular access and egrees, service and parking (500 spaces).

B. Functional Organization. Each of the alternative building concepts should articulate its own particular logic with regard to the functional requirements of higher education facilities. While there are special requirements which are peculiar to building programs of the Behavioral Sciences and the School of Education, there are also more general considerations common to all academic facilities. For instance, one such concern would be whether it is better to have a balanced "mix" of instructional, research and office facilities throughout each building in the complex or to have more specialized building elements, each of which would be designed to accommodate a more specific set of purposes; i.e., a joint classroom facility with adjacent departmental functions, etc. Accordingly, this phase of the study should demonstrate the manner in which each of the alternative building concepts is organized to provide for the following:

1. Classrooms and Lecture Halls
2. Instructional Laboratories
3. Faculty and Administrative (departmental) Offices
4. Research and Special Purpose Areas
5. Other.

The provision of these facilities should in each instance be related to a system of horizontal and vertical circulation, public access and egress, service facilities, utilities, etc.

C. Incrementation and Development Phasing. Each of the alternative building concepts should provide for a system of incrementation offering the maximum choice in the selection of future expansion priorities as well as meeting the specific phasing plan as presently programmed. (See attached Program Summary Sheets.) Office and Laboratory Stations, Research and Special Purpose Areas assigned to each department should be designated for each construction phase to show the total sequence of development. Space which may have to be exchanged from one function to another, or from one department to another, in order to maintain continuity within a department should be clearly identified.

PROGRAMMED NET AREA SUMMARY:
EDUCATION AND BEHAVIORAL SCIENCES

	Use of Space - Square Feet									
	Instructional				Office		Research	Library	Sp. Purpose & Other Use	TOTAL
	Classroom		Laboratory							
Name of Space(s)	Area	Sta.	Area	Sta.	Area	Sta.				
PHASE 1										
Education	6,720	600	1,000	30	21,650	264			19,530	48,900
Behavioral Science	4,650	400	10,725	206	11,820	122	21,060	1,400	13,473	63,128
Subtotal	11,370	1,000	11,725	236	33,470	386	21,060	1,400	33,003	112,028
PHASE II										
Education	5,200	400	1,200	90	13,250	168	3,950		26,240	49,840
Behavioral Science	14,300	1,100	3,800	89	16,580	314	55,030		11,650	101,360
Subtotal	19,500	1,500	5,000	179	29,830	482	58,980		37,890	151,200
TOTAL PROGRAM										
Education	11,920	1,000	2,200	120	34,900	432	3,950		45,770	98,740
Behavioral Science	18,950	1,500	14,525	295	28,400	436	76,090	1,400	25,123	164,488
TOTAL	30,870	2,500	16,725	415	63,300	868	80,040	1,400	70,893	263,228

Net areas of additions outside of Education - Behavioral Science Complex

School of Music- 38,900 s.f.
Clinical Services- 23,770 s.f.
Library- 375,000 s.f. (through year 2000)

APPENDIX 2